Organising for Sustainable Natural Resource Management:

Representation, Leadership and Partnerships at Four Spatial Scales

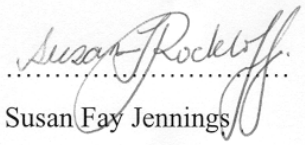
Susan Fay Rockloff

B.Sc. (Biological Sciences)(Hons), Post Grad Dip EIA

A thesis submitted to Murdoch University for the degree of Doctor of Philosophy.

December 2003

I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.



Susan Fay Jennings

ABSTRACT

Sustainability of natural resources is currently a concern worldwide. The ecological and economic aspects of sustainability have received substantial research attention, but the social aspects of sustainability are less well understood. Participation by affected communities in natural resource management decisions is pivotal to social sustainability. As such, this study examined ten case studies of participation and decision-making by natural resource management groups involved in agriculture in the south-west of Australia. Groups at four spatial scales were studied, including the State, regional, land conservation district (Shire) and subcatchment.

Drawing on these ten case studies, this study analysed participation in these groups from the perspectives of representation, leadership and partnership. Crucial elements of this analysis included identifying the desirable attributes of participation in terms of achieving social sustainability, and then comparing current practice against these ideals. The study concludes with comments about the efficacy at each spatial scale of current approaches to participation in terms of social sustainability.

Central conclusions from this study follow. Some scales are performing better than others in terms of meeting the expectations expressed through the desirable criteria. The State scale is performing well, in terms of its mandate, with its lower expectations than those ascribed to regional and subcatchment scales clearly being met. On the other hand, the expectations associated with the community- and government-led regional groups and subcatchment groups are enormous. The only place where there was any major difference between the three was in representation: it was barely considered by respondents from the subcatchment groups, while for the regional groups less of the expectations were met by the community-led than government-led groups. Otherwise

they were very similar. The land conservation districts, caught between the regions and subcatchments, seem to be faring the poorest.

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ABBREVIATIONS

AWG	Avon Working Group
BBG	Blackwood Basin Group
CALM	Department of Conservation and Land Management
CA RPG	Central Agricultural Regional Partnership Group
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEP	Department of Environmental Protection
FRC	Fence Road catchment group
GQQ	Gabby Quoi Quoi group
LCD	Land Conservation District

LCDC	Land Conservation District Committee
NHT	Natural Heritage Trust
NSESD	National Strategy for Ecologically Sustainable Development
SAICMCG	Swan-Avon Integrated Catchment Management Coordinating Group
SLCC	Soil and Land Conservation Council
SRD	Sustainable Rural Development
SRDSC	Sustainable Rural Development Steering Committee
SW RPG	South-West Regional Partnership Group
WA	Western Australia
WRC	Water and Rivers Commission
WWL	Wallatin Creek Wildlife and Landcare Inc.

ACKNOWLEDGEMENTS

There are many people who deserve recognition for their supportive role throughout my research component and preparation stage of this thesis. This work may not have been possible without the financial support from Land and Water Australia (formerly Land and Water Research and Development Corporation), through their postgraduate scholarship. This thesis was initially developed from the ideas of Dr Susan Moore, my principal supervisor, and I am deeply grateful to her for her guidance and support (and patience) during my doctorate. Sue has been a constant source of knowledge and ideas, and she is the kind of researcher I will always aspire to be.

My thanks to Dr Laura Stocker in the Institute for Science Technology Policy at Murdoch University for her supervisory assistance. A special thanks is given to Associate Professor John Bailey of Murdoch University for his support. My dissertation write up has extended over two states and two universities, which has meant most of my thesis has been written away from my supervisors, and I thank them for their patience and long-distance support. I would also like to extend my thanks to Assoc Prof Stewart Lockie of Central Queensland University for his support.

My grateful thanks to Stephen Renton for his transcribing and editing contributions; Alan Rossow at Murdoch University for preparing my figures; and Ross Lantzke, for his computer expertise. Recognition should be given to all those who participated in interviews and provided access to materials, although too numerous to list, their cooperation and assistance enabled the depth of material collected. Special thanks to the Gray, McFarlane, Morgan and Owen families for their rural hospitality and the memorable experiences.

To my mother and sister, Fay and Debbie Jennings, I take this opportunity to thank you for your love.

Finally, to my husband Dr Matthew Rockloff, thank you for your help in editing. You are my inspiration, and your love and commitment leave me speechless.

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CHAPTER 1.

INTRODUCTION

1.1 Introduction

Sustainable development requires dealing with uncertainty, complexity and change in an environment of conflict over the management of natural resources. To address these issues, decisions for sustainable development must be scientifically acceptable (biophysically/ecologically sound) and politically acceptable (fair and satisfactory), but also socially durable (empowering for commitment and ownership). Often, representatives of groups and councils are responsible for making and implementing such decisions on behalf of wider communities. How successfully they participate in this task will have a large impact on implementing sustainable development and preventing environmental degradation.

This study takes a different approach to previous natural resource management studies by using a social sustainability framework to help understand how the processes of public participation, environmental decision-making and organising can support social sustainability. Natural resource management[1] is a facet of sustainable development, with the latter providing an overarching framework of understanding. A grounded theory approach was used in this study to inform public participation theory, and to understand organising for social sustainability in natural resource management at numerous spatial scales.

[1] Natural resource management refers to "the process of influencing the interactions between people and the ecosystems on which they depend" (Aitken 2001, p. 1).

This chapter sets the context for the remainder of the dissertation. It begins with a conceptual framework for social sustainability, followed by details on the need for this research, the associated research questions and objectives. Next, the concepts of sustainable development, social sustainability, public participation and the components of representation, leadership and partnership that underpin the dissertation are explored. The context for the study is provided by describing natural resource management in Australia, and associated approaches to public participation.

Social Sustainability – A Conceptual Framework

Social sustainability can be described, in a narrow sense, as the commitment or willingness of all stakeholders to participate and commit to actions, with decision-making power held by public-private partnerships, to ensure long-term success of projects (Bennett 1998). Social sustainability also requires increased control by the individual and communities over their lives with associated stronger identity and participation in decisions which affect them (Neuman et al. 1997). More broadly, social sustainability produces a comprehensive framework for power sharing, equality, fairness, and empowerment through participation. In essence, this participation needs to "implement processes that are credible and legitimate while also being technically competent, democratically fair, and experientially pleasing and efficacious" (Webler & Tuler 2001, p. 37). It involves the coordination of decision-making and information flows across scales (Tonn & MacGregor 1998). Social sustainability has also been defined to cover the ability to maintain desired social values, institutions, traditions, cultures, or other social characteristics (Barbier 1987). There is also the importance of accounting for spatial scale in the progressive evolution of resource management institutions for the transformation to sustainability (Sneddon et al. 2002).

Social sustainability is threatened by the centralisation of power, which can lead to: the exclusion of stakeholders from decision-making, unfair processes of decision-making, absence of accountability, unequal representation, misrepresentation of interests, power imbalances, and dominant leadership. Tensions exist between the need to involve all legitimate interests in the decision-making process, and the need to achieve meaningful outcomes (Scott 1998). Conflict threatens attainment of social sustainability – it prevents effective participation, weakens partnerships, polarises representation of interests, and undermines leadership. Therefore, conflict resolution is a vital part of attaining social sustainability.

Social sustainability creates an environment which maintains sustainable practices. Sustainable practice involves technology and procedure which keep production outputs at levels that do not degrade or reduce the resource for future generations. However, not all practices that are sustainable are socially sustainable. A socially sustainable environment is where decisions made for sustainability are implemented and maintained. Decision-making that is socially sustainable provides the social institutions and structures for the advancement of sustainable development, and produces sustainable decisions that will be implemented on an ongoing basis. Organisations and societies in general are likely to be socially unsustainable if inequities and social conflict exist to impede implementation (Jacobs 1999).

A theoretical foundation for social sustainability is currently lacking. The framework for social sustainability presented here has been conceptualised from the sustainable development and public participation literature (Figure 1.1). Two conceptual levels are employed. The first covers the more abstract concepts of capacity-building, empowerment and social capital that are difficult to define and measure; and the second is the practical

participation level covering decision-making and organising, and consisting of representation, leadership and partnership. It is this second conceptual level that is the main focus of this study. The conceptual framework illustrates how social sustainability and social capital are substantive outcomes sought through processes of empowerment and capacity building from decision-making and participation. Social sustainability is illustrated as an outcome that is achievable through processes of decision-making and participation which possess certain characteristics. Attaining social sustainability is more likely if decision-making processes have specific characteristics. These characteristics are procedural precursors which are the means to achieving social sustainability as an end point.

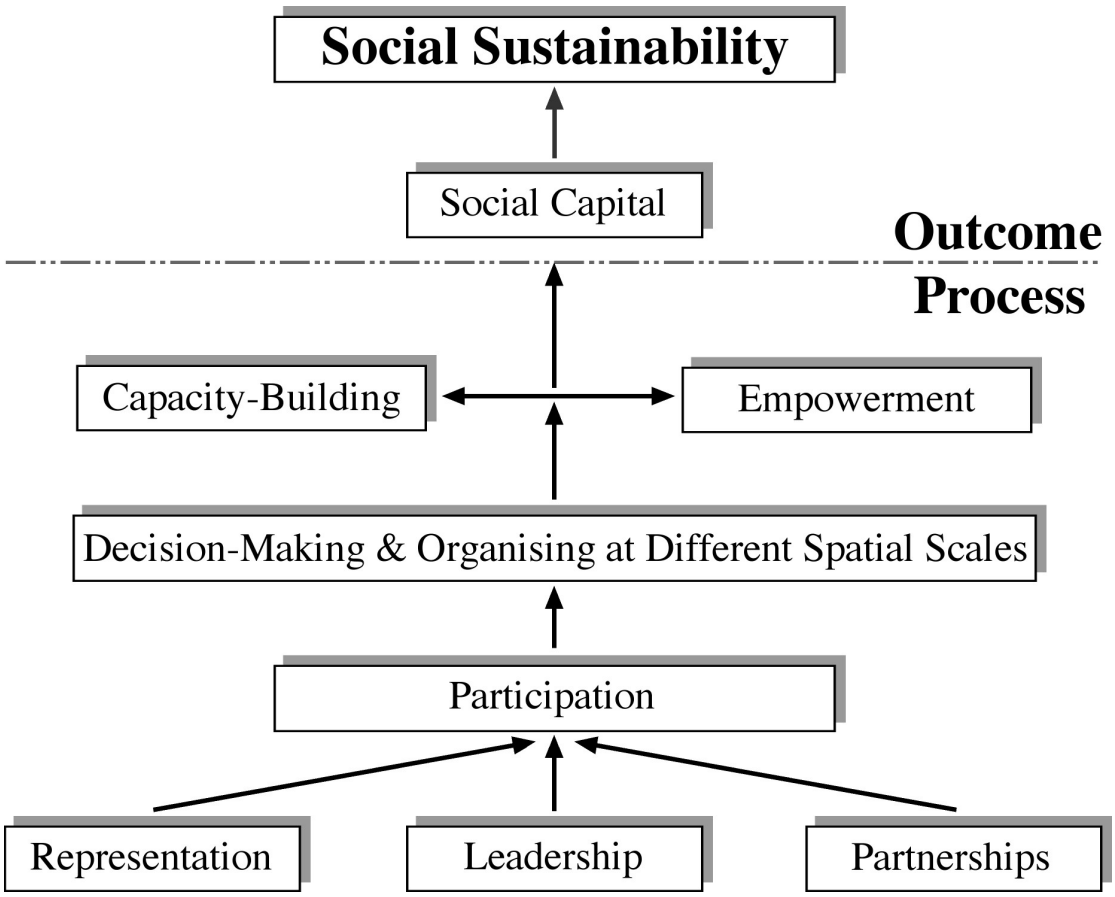

Figure 1.1 Conceptual Framework for Social Sustainability.

The main theme of this study is an exploration of the ways in which human social organising in various contexts (political, economic, cultural, ecological) occur at multiple spatial scales. From four spatial scales, the influence of social organising on the long-term sustainability of agricultural landscapes is explicated. The conceptual framework (Fig 1.1) is used to develop chapters 4, 5, and 6; with their focus on representation, leadership and partnerships; and to guide examination of participation within the broader conceptual context of social sustainability. In the conclusion (Chapter 7), the conceptual framework is revisited to illustrate how representation, leadership and partnerships influence the abstract concepts of social sustainability of social capital, capacity building and empowerment.

Social capital refers to the organisations, structures and social relations citizens build, independent of State (e.g. government) or other external entities, that increase productive potential (Roseland 2000). It consists of the shared knowledge, understandings, and patterns of interactions groups produce in an environment of trust and interconnected communication networks (Roseland 2000; Putnam 2000; Putnam 1993; Coleman 1988). Social capital is based on the trust and relations between stakeholders, and relies on effective participation. This concept has been viewed as the personal resources individuals gain from membership in a group (Bourdieu 1986), and is founded on trust and social relationships between participants for shared action. As a product of social interactive processes, social capital contributes to community wellbeing (Falk & Kilpatrick 1999).

Social networks take the form of mutually recognised bonds, information channels, norms and sanctions (Roseland 2000). Social capital is a non-transferable entity created over time by interactive (micro and macro) processes that draw on knowledge, and can be harnessed by the community to assist in social change (Roseland 2000; Falk & Kilpatrick 1999). Social capital relies on use. Otherwise, social capital deteriorates at a rapid rate.

Capacity-building strengthens the capability of participants to influence decision-making and policy development. It enables stakeholders to play their respective roles to better implement sustainable development (Rahardjo 2000). Capacity is improved by strengthening the competency of persons, groups or agencies to solve their own problems. It highlights the important distinction between delivering services, and improving the skills necessary for better delivery of services (Dugan 1993). Capacity is dynamic and changes with shifts in focus and development, and is enhanced by expert assistance, and the capacity-building efforts of communities and government. A number of dimensions of capacity exist, including – technical, financial, institutional, social and political facets (De Leo et al. 2002). Gray et al. (2002) note that there is a gap in the current literature on the relationship between community capacity-building and leadership. They propose that leadership is "seminal to the development of social capital and community capacity" (De Leo et al. 2002, p. 4).

Empowerment is a social process[2]. As pointed out by Buchy and Race (2001, p. 295), empowerment "is not about a transfer of power per se, but a challenge to existing power structures". At a normative level the claim for participation is then linked to empowerment with changed power relations.

> Participation can lead to "empowerment" of disadvantaged and hitherto "invisible" individuals, groups and sectors, and organisations … such empowerment can be seen as "power to", meaning increasing the capacities of individuals to make decisions that affect their lives, and partly as "power over", meaning increasing the power of some individuals and groups. (Johnson & Wilson 2000, p. 1992; Johnson & Mayoux 1998, p. 149)

[2] The concept of empowerment has been studied on numerous levels (Perkins & Zimmerman 1995), from the level of the individual, organisation and community (Kroeker 1995).

While many researchers present empowerment as the “giving” and “taking” of power (Clegg 1989), social sustainability requires improving the capacity of marginalised groups to have a voice in decision-making.

Empowerment involves gaining influence over outcomes of importance. This process can function at multiple and interconnected levels, including the individual, group, organisation and community levels (Fawcett et al. 1995). A mechanism for gaining capacity, empowerment allows people, organisations and communities to gain mastery over their affairs (Rappaport 1987). This concept has been described as the power being given to or seized by citizens (Ife 1995). Empowerment’s definition varies depending on who is doing the defining, and may include features of control, power, autonomy, self-reliance, self-determination, representation or participation. For instances, the process of participating in decision-making is empowering for individuals and groups, but to participate they need to be empowered (Zimmerman 1995).

The concepts of social capital, capacity building, and empowerment provide a practical foundation to inform the main focus of this dissertation, namely participation. The reason for this is because “participation plays a crucial role in the sustainable development model” (Jacobs 1999, p. 42). From a social sustainability perspective, three aspects of participation are studied in detail in this thesis: 1) *representation* - to promote meaningful and democratic public participation; 2) *leadership* – to direct fair processes and empower individuals and organisations; and 3) *partnerships* – to build capacity and collaborative understanding between partners who are empowered in a two-way interactive relationship based on equitable arrangements.

The rationale for examining these elements of participation as a means to achieving social sustainability can be provided by answering the questions of: (1) Why are these three aspects of participation important in the process of achieving social sustainability? (2) What specifically do they contribute? (3) What is likely to happen if they are not present that may impede the achievement of social sustainability? Firstly, the importance of these three aspects is already underscored by the findings from existing social research, which highlights the links from participation to sustainability, through representation, leadership and collaboration. More specifically, it is the involvement and commitment of all stakeholders to participate and implement decisions (Bennett 1998); control by individual and communities over their future through their leadership and empowerment (Neuman et al. 1997); and the building of consensus which fosters better relationships and carries actions forward (Sinclair & Smith 1999). Other researchers have also identified links between participation and the social sustainability concepts of capacity building, empowerment and social capital (Gray et al. 2002; Northouse 1997; Bourdieu 1986).

Secondly, the three elements of participation contribute a foundation for organising and decision-making which explicitly seeks to advance groups towards a more sustainable future by ensuring fairness in process, democracy, accountability, equality in power, proportional representation and fair outcomes. Finally, the presence or absence of these three aspects of participation to the achievement of social sustainability is likely to compromise the ability to reach negotiated and fair decisions, the durability of decisions to carry actions forward and the resultant change for a more sustainable future.

Need for Current Research

Agenda 21, the international plan and official mandate for action for implementing sustainable development (United Nations Conference on the Environment and

Development (UNCED) 1992), promotes citizens' rights to participate, and calls for new approaches to public participation, institutional change and partnership-building as necessary ingredients of sustainable development. An important part of Agenda 21 is its attention to participatory processes of decision-making. Principles of Agenda 21 direct the States (governments) to facilitate and encourage public awareness and participation (Principle 10), highlight the importance of securing the full participation of women, the younger generations, Indigenous peoples, and other local communities in environmental management and development (Principle 20, 21, 22, 23), and cooperate through partnership in the fulfilment of the Agenda's principles for sustainable development (Principle 27)(UNCED 1992). Elements of the associated action plan promote measures to expand avenues of participation, enable responsible participation and strengthen participation in representative institutions (Sharp 1995). It also has an egalitarian and democratic outlook, supporting strategies that meet the needs and encourage the participation of disadvantaged groups in decision-making (Agyeman & Evans 1994; Robinson 1993).

Agenda 21 makes demands for governments to review current decision-making procedures to identify weaknesses, and to better integrate environmental, social, economic, cultural and political issues through strengthening of procedures (Robinson 1993). The importance of participation in these decision-making processes is underscored by Agenda 21, which also encourages actions for capacity-building (Sessions 1993).

It is clear that participation is a prerequisite for sustainable development (Iyer-Raniga & Treloar 2000; Sharp 1995), and one of the general challenges arising is institutionalising community participation in policy and management. Principles for public participation processes for sustainable development include the need to achieve equity between

generations; equitable distribution of power in decision-making; provision for social self-determination and cultural diversity; and for participatory processes to provide for an interactive process for collaboration (Gardner 1989). The call for a deeper understanding of sustainability and the appropriate structures to enable participatory processes is widespread (Iyer- Raniga & Treloar 2000; Dore & Woodhill 1999), and demonstrates the need for further investigation.

Research into public participation over the past two decades has produced an enormous number of publications examining, analysing and developing new understandings of participation in natural resource managment. A plethora of information on public participation, from various contexts and involving different actors, has largely described: criticisms of traditional participatory methods (Perkins Spyke 1999); the timing, form, and level of participation (typology) (Cornwall 1996; Adnan et al. 1992 in Pretty 1995; Arnstein 1969); determining success factors of public participation (Todd 2001; Carnes et al. 1998); defining process and outcome principles for "good" public participation (Buchy & Race 2001; Webler et al. 2001; Tuler & Webler 1999; Shindler & Nebruka 1997; Moore 1996; Wilcox 1994); crafting effective strategies for public participation (Plein et al. 1998; Wondolleck et al. 1996); and devising evaluation of participation methods (Halvorsen 2001; Griffin 1999; Blahna & Yonts-Shepard 1989).

Similarly, studies on natural resource management and environmental decision-making for planning or management have described participation processes in order to improve efficacy in terms of the processes themselves. Few of these studies have, however, explicitly focused on participation through the lens of social sustainability, and simultaneously examined issues across different spatial scales. A related gap in the literature is evaluation of the social sustainability of environmental decisions, associated

decision-making processes, forms of organising by community organisations, and the factors influencing decisions at different spatial scales. This study seeks to provide an analysis of participation as part of an overall framework of social sustainability, rather than adding to the existing wealth of material on decision-making and participation.

The study was located in the agricultural landscape in Western Australia for several reasons. In Western Australia agriculture plays a major role in the State's economy, and sustainability of the natural resources is necessary for continued viability. Salinisation of land and water in the agricultural areas of Western Australia is one serious environmental problem resulting from past production practices, and is the major land degradation issue confronting primary producers, communities and government. Numerous reports over the severity of the deterioration of Western Australia's environment have sought to describe the biophysical problem, and suggest new management methods to ameliorate the effects of past agricultural land use (Government of Western Australia 2000a & 2000b; Task Force for the Review of Natural Resource Management and Viability of Agriculture in Western Australia 1996; Standing Committee on Agriculture and Resource Management 1993).

Nationally, the most dramatic effects of salinity and its associated land conservation issues (e.g. biodiversity loss, soil erosion) have occurred in Western Australia. Efforts in the past have endeavoured to provide ecological, biophysical and engineering solutions to the problem to achieve sustainable agriculture. More recently economic instruments and policy development have been implemented (e.g. Salinity Action Plan). The social aspect of managing sustainability in agricultural landscapes requires decision-making supported by the appropriate social institutions, arrangements and structures.

In examining organising for sustainability in agricultural landscapes, it was important to consider and focus attention on how natural resource management decision-making occurs at different spatial scales. In the past, the study of scale in ecology has generated a challenge to natural scientists in understanding how ecological processes operate at the many spatial and temporal scales. The scale at which decisions are made to provide solutions to environmental problems is recognised as a critical concern in the policy-making process, and a significant feature in formulating and executing environmental policies (Rykiel 1998). While Rykiel (1998) seeks to develop a deeper understanding of the role of ecological scale considerations in decision-making processes, this study explores scale from a social perspective.

The concept of "scale" is socially constructed, and frequently refers to scales of human interaction "defined and mediated by historically and geographically specific, and highly dynamic, social relations" (Sneddon et al. 2002, p. 667). A feature of scales is their ability to operate in a non-hierarchical manner, which means smaller scales can operate independent to larger scales (Sneddon et al. 2002).

Management of natural resources is predominantly practiced through nested spatial scales (e.g. State/province, regional, land conservation district) that involve relationships of social power. Some spatial scales can also be physically and ecologically derived, and nested (e.g. river basin or region, subcatchment) (see Sneddon et al. (2002) for organisation of social space along scales). A critical scale issue is

> environmental problems involve an asymmetrical problem in decision scale – actions that are rational from an individual viewpoint lead [but] inexorably to destruction … on a larger and more long-term scale … a social trap inherent in the scalar discontinuity between the scale of individual concern and the scale at which landscape-scale environmental problems emerge. (Norton 1995, in Rykiel 1998, p. 493)

Understanding the organising at different geographical spatial scales, is crucial to learning how social processes may be "constructed according to an entirely different scalar logic" (Sneddon et al. 2002, p.666) and the interplay between certain scales. There is a need to operate natural resource management in a way that is mindful of the multiple scales, and to assess the sustainability of organising. The following policy question provides a clear justification for studying the influence of scale on social sustainability - "On what scale should attempts to achieve sustainability be made and coordinated?" (Lélé 1993).

Research Questions

This study addresses the social aspects of sustainability with respect to group organising and environmental decision-making. This study is descriptive, normative, and prescriptive. The guiding research question was: *How well do current forms of organising for making natural resource management decisions at a range of spatial scales in agricultural south-western Australia perform in terms of sustainability?* The following five research objectives were addressed to answer this question:

1. Define and describe the relationships between social sustainability, participation in decision-making as a cental tenet, and representation, leadership and partnerships as key features of participation.
2. Categorise and analyse the characteristics of representation, leadership and partnerships at four spatial scales, from State to subcatchment.
3. Evaluate, using respondents' criteria and comments, how well representation, leadership and partnerships performed at each of these spatial scales.
4. Determine, drawing on this evaluation, the strengths and weaknesses of decision-making, as a central tenet of social sustainability, at different spatial scales.

5. Review, based on previous research and this study's findings, the features of such decision-making that support social sustainability.

The question of scale is complex for several reasons. Firstly, ecological processes occur at many "natural" spatial scales, often over a range of temporal scales. When biophysical problems occur over several scales, different management approaches at each scale are often required for success. These biophysical problems are dynamic, necessitating the recognition of cross-scale linkages for a complex understanding. Secondly, superimposed over these biophysical scales are social scales of natural resource management and planning, which function within political, economic and cultural settings. Problems occur in natural resource management when managers attempt to address biophysical issues within narrowly defined socio-economic boundaries. Thirdly, no single "correct" scale exists as the appropriate scale for management of natural resources.

This research examines the decision-making processes of natural resource management groups in agricultural landscapes, rather than evaluating the outcomes. A similar process approach was taken by Gardner (1989), and more recently by Jennings and Moore (2000) in their assessment of the sustainability of decision-making approaches in biodiversity conservation strategies. The outcome of environmental decision-making is not evaluated to determine the actual achievement of social sustainability. To make an assessment of the decision processes' ability to succeed in achieving desired outcomes was beyond the scope of this study. The development of such a social sustainability assessment tool to help resource managers, policy developers, and others, understand how the current natural resource management organising is functioning would undoubtedly make a significant contribution to environmental management.

1.2 Sustainable Development

The term “sustainable development” takes account of social, ecological factors, and economic factors. It includes the living and non-living resource base, and considers the short and long-term advantages and disadvantages of different options (IUCN 1980). Elkington (1997) has drawn on earlier ideas of sustainable development to coin the term “triple bottom line”. This refers to the three prongs of socio-cultural, environmental, and economic viability, and distinguishes the multiple dimensions of sustainable development. These three prongs are directly tied to the concept of sustainable development.

There are numerous definitions of sustainable development. It is a “kaleidoscope with many facets which mirror variations in concepts” (Zinck & Farshad 1995, p. 407). Generally, it is described by three core interrelated principles: ecological (e.g. biophysical factors and carrying capacity); economic (e.g. equity, markets and growth); and socio-cultural (e.g. participation, democracy, social justice and cultural). Variations on these principles exist, but essentially they cover the realm of ecological, economic, social, cultural, ethical and political dimensions (Chiras 1995). They cannot be divided into an agreed set of discrete components. Sustainable development depends on interactions, changes and transformations in ecological, economic and socio-cultural systems. Frequently sustainable development is described as involving a “process of trade-offs” among the various goals of these three systems (Barbier 1987, p. 104).

Sustainable development is a contested topic, whether between policy-makers, around the decision-making table, or measuring for sustainable development using indicators. Since the emergence of the sustainable development paradigm in the 1990’s, there still continues to be vagueness surrounding the meaning, definitions and theoretical underpinnings of the concept (Niu et al. 1993). To many environmentalists, the concept of sustainable

development is an oxymoron (Beder 1996). As a "contestable concept" at one level it has a unitary but vague definition resting on a number of "core ideas" (e.g. participation and equity) (Jacobs 1999). One such agreed definition of sustainable development is from the Brundtland Report, which defines it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987, p. 8). At the second level, the contest is political and concerns how the concept should be interpreted in practice (Jacobs 1999).

Australia's macro policy response to sustainable development, the National Strategy for Ecologically Sustainable Development, contains a strong social dimension, and encompasses the objectives and principles of sustainable development.[3] The National Strategy seeks to establish policy and administrative frameworks for environmental protection, while being cognisant of social and economic objectives (Fenton et al. 2000). The Australian definition is "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased" (Commonwealth of Australia 1992a).

In this study the broad conception of sustainable development is expanded to include the concept of "sustainability". The following distinction helps to avoid confusion in terminology. Sustainability encompasses the cultural, economic and environmental health, together with the importance of linking our social, financial and environmental well-being (Sustainable Seattle 2000). Simply, the concept of "sustainability" refers to not just the environment, but to society itself recognising that "… only cohesive societies can protect nature, and because communities and cultures are valuable in their own right" (Jacobs

[3] In Australia, reference to ecologically sustainable development is generally equated with sustainable development.

1999, p. 37). In other studies, the two terms of “sustainable development” and “sustainability” are used interchangeably as one concept (Iyer-Raniga & Treloar 2000).

Sustainability is a social construct, and as such the operationalisation of the concept must attend to the social context in which sustainability is considered and implemented, as well as differences between scientific analysis and value judgements. As stated by Lee (1992, p.75), “sustainability is fundamentally a problem of human social organization and technology, not simply management of the physical environment”. As Moore (1997) points out, sustainability is a social construct that varies from social group to social group, thereby making it a broad concept with a myriad of interpretations. There is concern also that sustainable development is defined to suit the interests of those defining it (Beder 1996). While this study has put forth definitions of these concepts, the concerns over those definitions are noted. This study seeks to provide input to the sustainability discourse through contributions from empirical understandings.

1.3 Social Sustainability and Participation

Areas of recent research focus in terms of social sustainability have included the sustainability of forestry and rural communities in relation to economic transition, community vitality/functionality in the face of natural resource exploitation (Rannikko 1999; Reed 1999), and planning for change in cities (Polese & Stren 2000). More recently, Pepperdine (2001) has developed a suite of social indicators to measure rural social sustainability. This indicator set is a tool to facilitate the integration of social issues into planning and policy making. Ife (1995) refers to social systems, institutions and organisations, and the need to evaluate them from the view point of social sustainability, and long-term viability. More recently, social sustainability has been viewed in terms of

sustaining initiatives after projects are completed, and institutionalising citizen participation in social programs at local level (Stein 2001).

Social sustainability centers on procedural concerns including issues of governance, participation, representation, fairness, democracy, and accountability (Jacobs 1999; Neuman et al. 1997; Wild & Marshall 1999; Diffenderfer & Birch 1997). It also centers on distributive concerns including equality in power, proportional representation and fair outcomes (Lane 1986). These elements of good process can enhance the potential to achieve social sustainability.

Environmental justice has become an integral consideration. Social justice[4] which is a key element of environmental justice seeks to reduce social inequities (Ife 1995). Components of social justice include access, equity, rights and participation (Dale & Bellamy 1998). Of specific interest in this study was procedural justice (who was involved, who was excluded and the impartiality of the process), as outlined by Moore and Bache (1998), and how this differs between scales. Particularly in the United States, the environmental justice and equity movement has emerged in response to the need for environmental reform following revelations that ethnic minorities and the poor are far more likely to be the innocent victims of waste and hazard exposure than other groups (Albrecht 1995).

The importance of participants being integrally involved in decision-making processes, from problem identification through to implementation continues to be promoted (Jacobs 1999; Moote et al. 1997; Blahna & Yonts-Shepherd 1989). Proponents of participation comment that more sustainable natural resource management will result from greater public participation in planning (Steeland & Asher 1997). Better outcomes and community

[4] Social justice and social equity are used interchangeably, and both mean fairness in the process and outcome of decision-making and participation.

benefits will come from increasing citizen access to consultative processes (Munro-Clark 1992). Public participation is seen as a means to improve the quality and efficiency of decision-making. In terms of better outcomes, citizens can come up with the information and innovative solutions that would otherwise not be available (Enserink 2000).

Public participation has been defined from various perspectives, and participants have been ascribed with varying roles and status. In the community psychology literature, public participation has been defined as "a process in which individuals take part in decision-making in the institutions, programs and environments that affect them" (Heller et al. 1984, p. 339). Participation is the way in which individuals are involved in decision-making processes and is comprised of various forms of informal and formal procedures. Participation as a process has been identified as having positive consequences, including: capacity-building; sharing control over development and resources; enhancing the abilities of participants to act independently (capacity-building and empowerment); facilitating dialogue between citizens (Brown 1995); and learning and trust (social capital) (as per Figure 1.1). In particular, participation when maximised produces outputs which include decisions, along with the development of individuals' social and political capacities due to the educative component of participating (Pateman 1970).

Challenges to Public Participation

Effective pubic participation is hampered by problems in securing participation, the process of participation, and resourcing participation. Past studies on public participation have found identifying and securing the commitment of marginalised persons is difficult (Wild & Marshall 1999). Unequal power relations between participants may create a barrier to obtaining participation due to dependency and manipulation. It is difficult for participants to express their interests and present a "voice" at the decision-making table. In

terms of resource issues, participatory and partnership processes entail commitment of greater resources, but produce greater efficiency in implementation (Smith & McDonough 2001; Botes & van Rensburg 2000; Johnson & Wilson 2000; Carnes et al. 1998; Johnson & Mayoux 1998; Smith et al. 1997; Ife 1995).

Public participation in environmental decision-making is frequently enshrined in statute and expected by the community; it is seen as a "given" especially in relation to public lands. However, government agencies and personnel are under increasing budgetary constraints, and often have little incentive to change traditional practices. They may practice public involvement as they always have, but under a "different wrapping" or name (Taylor 2000a). The use of public meetings, while providing opportunities for information exchange and public complaints, give limited public involvement in planning and policy design (Hoover & Shannon 1995).

Opportunities for developing better relationships, and processes of participation between government and citizens, may lie with changing institutional arrangements to those that promote more participatory deliberations. For example, a learning-based approach to public participation advocated by Daniels and Walker (1996) is based on a collaborative learning process that builds capacity, as opposed to traditional informing and consultation proffered by decision-makers. Involving citizens in learning processes increases self-esteem and confidence, with more effective resource use as a result (Chambers 1997), along with a sense of personal empowerment. Changes in participation and partnership practices also depend on "more powerful individuals, groups, organisations and institutions voluntarily giving up some of their power within the participatory processes" (Johnson & Wilson 2000, p. 1983). Furthermore, the "institutionalisation" of participation, by adopting

transparency and accountability into institutional arrangements, is essential for open and democratic participation and expression of values and attitudes (Johnson & Wilson 2000).

In public participation processes, there are multiple agendas and a diverse range of participants, and often there is conflict in these pluralistic situations. The issues can be emotive. The resultant conflict plagues natural resource management where solutions require collective agreement and action (Wondolleck 1988). In many cases this conflict is between State government agencies charged with the responsibility of natural resource management of specific sectors including forestry, biodiversity, water resources, land resources, and resource planning (Jennings & Moore 2000). Less attention has been given to intra-organisational conflict, although it clearly exists.

Forms of Democracy – Representative and Participatory

The "rule of the people" defines democracy, but what comprises and who defines "the people" differs among authors (Ife 1995). Two approaches to democracy distinguished in theory and practice are a representative process, involving leaders or interest representatives with a stake in the outcome, and a fully participatory process that includes as many interested citizens from all socio-cultural backgrounds as possible (Blahna & Yonts-Shepard 1989). Representative democracy has been the prevalent model of citizen representation in modern societies and is characterized by [unrepresentative] interest groups who elect people to make decisions on their behalf. Sometimes seen as an elitist form of governance, with only a few chosen individuals representing the interests of the affected publics, representative democracy is promoted on grounds of efficiency, especially over issues of conflict. Such efficiencies include both the ability to react faster to changing political circumstances, an advantage over the conservative tendencies of direct democracy (Rippe & Schaber 1999), and slow reaction time if there are a large

number of participants. Traditionally this form of democracy has been the norm, even at local government level, where a representative participation approach is utilized (Ife 1995).

Participatory democracy has been favoured (and practised) at various times through human history dating back to ancient Greece. However, from the early 90s there has been a trend towards communicative or participatory democracy approach to public participation. The concept has been defined by: individuals having a known and quantifiable effect on decisions; a process citizens can understand and evaluate; and participation that is fair and allows each individual's input as having the same weight – a "level playing field" with no power disparities (Knopp & Caldbeck 1990). This concept is premised on greater democracy, through the capture of dispersed and disenfranchised interests, than those held by small representative groups and proportional representation (Knopp & Caldbeck 1990). The challenge for participatory democracy is including those people who do not have the capacity or the desire to participate in the process, and overcoming selective participation and manipulation (Botes & van Rensburg 2000). Two key aspects of a participatory democracy approach are involving the community affected by decisions in the decisions-making process, and finding communities who can take responsibility for implementing these decisions. Accountability should be downward and outward reporting, as opposed to upwards (Ife 1995).

The main difference between representative and participatory democracy is the extent and breadth of citizen involvement. The *sine qua non* of participatory democracy is maximum and direct participation of all people. The representative model assumes that not all citizens are willing or able to be involved in daily decision-making and determining the common good, and so they select public officials or community leaders to make decisions. Representative democracy, otherwise described as liberal democracy (Dryzek 1990), refers

to the notion of representatives elected by the people deliberating about public problems in a search for acceptable solutions that satisfy the common interests. Some shortfalls of representative democracy are the minority groups may get no voice in decision-making forums (e.g. Parliament), and elections fought on single issues (Stocker & Pollard 1994).

Participatory democracy seeks to discourage unequal influence and power, by allowing direct participation in decision-making processes otherwise restricted to elites. The idea that the "maxim for maximum participation is a maxim for non-elitism" encapsulates the concept of public participation based on participatory democracy (Baptiste 2002). Notions of participatory democracy, to which many community members aspire in entering partnerships, require that governments share decision-making authority and power with all other stakeholders within the constraints of their legal authority and accountability (Moote et al.1997). Participatory democracy aims not only to build participatory institutions, but also to develop social capacity in participants through their involvement. Radcliff and Wingenbach (2000, p. 977) assert "participation in the method contributes to the development of human capabilities".

Representative *public participation* involves individuals, as representatives, taking responsibility in their role, and displaying a public interest orientation as to what is morally required. Rippe and Schaber (1999) link democracy with the notion of civic morality, such that "democracy presupposes a civic morality [whereby] … democracy works better if supported by a civic morality … civic morality not only requires that people should vote, [but] civic morality also demands that people vote 'intelligently, seriously, and in a publicly defensible manner' (Lomasky & Brennan 1993, p. 10)" (p. 86). Representative public participation has individuals representing the specific interests of their groups on matters of policy-making, planning and management.

In contrast to a representative approach, participatory public involvement directly includes citizens in decision-making through a continuous, collaborative process aimed towards overcoming social conflict by building community and shared understanding of issues, solutions and other participants (Moote et al.1997). Features include involving all citizens and their social values in making decisions, sharing decision-making authority through government relinquishing sole control, and citizens sharing responsibility for implementing decisions. Differences in inclusiveness and access define these two approaches to public participation. “Representative” public involvement means working closely with leaders of certain key interests with a stake in the decision, while “participatory” public involvement requires the involvement of nonrepresented members of the public (Blahna & Yonts-Shepard 1989).

The ideal of broad cross sections of the public participating in decision-making is rarely achieved (Overdevest 2000). The socio-economic characteristics of participants are often very different to those of the broader population (Overdevest 2000). Along with the commonly cited resource barriers to participation, individual citizens often face intellectual and motivation impediments (Overdevest 2000; Moote et al. 1997). Another difficulty, is extremely slow decision-making if a large number of individuals are involved. Rippe and Schaber (1999) argue against this disadvantage, and propose that today’s information technologies overcome this problem as well as reducing the costs of participatory public involvement.

Then there is the issue of civic morality, and the demand for citizens to participate intelligently, seriously and appropriately. Civic morality needs to be supported through

more detailed information provision to citizens, but it is more costly (Rippe & Schaber 1999).

Participatory planning processes are becoming more popular (Wild & Marshall 1999; Moote et al. 1997), along with the use of participatory democracy frameworks in organising for collaborative outcomes (Hoover & Shannon 1995). Yet not all circumstances are suitable for participatory public involvement. Some solutions obtained by citizens at a local scale may not be optimal from an environmental point of view (Rippe & Schaber 1999). Such solutions may not support environmental goals at larger natural resource management scales, such as regional and State scales. Even at smaller scales poor management may occur if only landholders and not the wider community make decisions.

Participatory and collaborative processes are seen to provide improved understanding of the relationship between science and human values in decision-making, reducing conflicts in the planning process and improving implementation. In place of top-down approaches of centralised planning, the participatory model is a bottom-up approach involving local communities in environmental management and decision-making (Moote et al. 1997; Smith et al. 1997; Vasseur et al. 1997). An underlying assumption of the participatory model is that its application will produce the desired outcome envisaged by “experts” and sought by community.

Accountability is regarded as an essential element of democracy. In democracies worldwide, elected officials are supposedly accountable to electors. Mechanisms are generally in place that enables electors to question decisions and monitor actions (Ife 1995). For both representative and participatory - public participation, accountability is also a key element (Jennings & Moore 2000; Graycar 1981). Woodhill (1996) argues for

community representation in the broader processes of government to achieve accountability. This community-led model seeks to overcome the limited success in practice of ensuring and supporting accountability currently experienced, and today's economic rationalism where accountability is only "upward" to management (Ife 1995). For participatory democracy, accountability will be directed downwards and outwards to the people directly concerned (Ife 1995).

1.4 Crucial Elements of Public Participation - Representation, Leadership and Partnerships

The literature on public participation has shifted from questioning the presence and legitimacy of the public's role in decision-making with governments, to discussing and debating participatory approaches as academics and practitioners search to get participation "right" (c.f. Glicken 2000). Dominating the arena of public participation are principles for citizen engagement, descriptions and evaluations of participatory approaches, and recommendations for reducing difficulties in implementation of processes and "success" factors. While there have been advances in those discussions in relation to natural resource management, the selection of representation, leadership and partnership for attention in this study sought to focus on changes necessary to achieve "sustainable" decisions.

Issues of Representation in Participation

Numerous interconnected issues confront representation, concerning fairness and equity, inclusiveness, representativeness, and empowerment to democracy**.** Representation means more than physical inclusion of community representatives on decision-making bodies (Martin et al. 1992). It extends to all views being heard and taken into account. This concept of "fair" representation consists of a suite of issues. Perceptions of fairness are

likely to be based on whether an individual has “earned the right” to represent their community, and is related to the notion of “justice of earned desserts” (Lane 1986). Citizens who have previously contributed to their community, or are known to others, are also more likely to be perceived by their constituents as providing fair representation, as opposed to unknown individuals. However, issues of equity may be neglected in such an evaluation. Graycar’s (1981) argument for regional organisations, and the need for an elite and influential membership, complement Lane’s (1986) reasoning. The underlying point made by Graycar (1981) is that for groups to be credible, they need to be seen as authoritative, with this authority derived from the perceived status of their members and their powerful peer groups**.**

Inclusiveness and representativeness can be negatively influenced by significant disparities in power and wealth between citizens (Bellamy & Johnson 1997). Similarly, there is often selection of the most articulate and influential community members, continuing the problem of under-representation of the disadvantaged (Curry 2001).

In considering citizen empowerment, it is problematic to lump all citizens together. Some citizens have strong networks for influencing government-driven processes through established relationships. Such citizens with these sophisticated mechanisms are already “empowered” (Jennings & Moore 2000), and again it is these citizens who are most likely to become involved in organisations linked to governmental decision-making (Graycar 1981). Others do not have these networks or other forms of power, meaning “empowerment” must be considered as integral to their involvement.

Often representatives on decision-making groups belong to numerous organisations, with benefits and disadvantages. Benefits include the provision of communication and

coordination links between groups and across organisational scales. Disadvantages include restricting the diversity of people representing other parts of the community, and inhibiting the building of leadership capacity in other proactive individuals. Also, there are questions on the benefit of individuals "representing" a particular group or point of view, and how this influences their ability to negotiate and compromise (c.f. Eggins et al. 2002 for social identity and negotiation). Often such representation makes negotiation within the larger group impossible. Representatives may not have the devolved authority from their parent organisations to adopt different positions to achieve consensus. An alternative approach is membership based on breadth of experience or other broader attributes enabling members to negotiate and adjust their views within the larger group, rather than being beholden solely to represent the view of their constituent organisation (Stocker & Moore 1999).

The representation of cultures and races in decision-making is important in terms of equity, inclusiveness and representativeness. In respect to Indigenous Australians, there are a number of barriers to their participation. Few Indigenous people are involved in natural resource management groups (c.f. Jennings & Lockie in press; Lane 1999; Gillespie et al. 1997; Lane 1997; Craig & Erhlich et al. 1996; Lane & Chase 1996). Australia's Indigenous people have in the past not had their rights recognised in relation to traditional country, nor as natural resource users and managers (Jennings & Lockie in press; Lane 2002; Gillespie et al. 1997). The restoration of property rights to Indigenous people does not automatically mean governments will extend those rights to participation and management in environmental issues (Dodson 1995).

The skills and knowledge of Australia's Indigenous people provide an important contribution to current understanding of the environment (National Natural Resource Management Task Force 1999), and their participation in natural resource management is

supported through Principle 22 of the Rio Declaration. For advances in this area, important issues warranting attention pertain to establishing processes to support Indigenous land management rights and responsibilities, and understanding their values and aspirations for management of their land (Dodson 1995). Self-determination, as a right in international law, allows Indigenous people to pursue their own future development in their own way. It also recognises their rights to make decisions and control implementation of actions, as opposed to simply managing government programs (Yencken & Porter 2001). More attention needs to be given to how European decision-making frameworks may be incompatible with other cultures' ways of making decisions. Where these "European-Australian" planning and decision-making processes are culturally inappropriate or insensitive, changes can be further facilitated by explicitly designed strategies for inclusive participation (Lane 2002) and cultural awareness training.

Leadership in Groups

Leadership is the second key element of participation explored in this study. It can strengthen the capacity and outputs of a group, raise members' awareness of the group's issues, and through advocacy, improve opportunities for sustainable development. To satisfy justice and fairness concerns, leaders need to lead by example and present model behaviour. This means upholding democratic principles, which are met through leadership providing fair and inclusive participatory processes. Effective leadership by citizens is viewed as critical to the success of collaborations (Foster-Fishman et al. 2001). Proactive leadership, a feature of successful partnerships, shifts energies from reacting to crises to anticipating problems, planning strategically, and taking responsibility (Wondolleck & Yaffee 2000). Yet the volunteerism aspect of community leadership often means such actions are constrained by resources.

Organising effectively requires strong leadership with the requisite skills (e.g. communication, conflict resolution, and administration), good relationships (internal and external), and a vision that directs individuals towards collective goals (Foster-Fishman et al. 2001). Capacity building enables communities to direct change through empowering leaders, resulting in the desired outcome of better natural resource management (Gray et al. 2002). Empowerment of groups and individuals results when leaders create an enabling environment for action (Northouse 1997) and foster satisfaction and commitment of members.

Leadership is determined through representation and the involvement of motivated and competent individuals. Providing and maintaining stable leadership by participants draws heavily on a limited volunteer pool, and frequently the same few citizens. Maintaining strong leadership also requires nurturing and building a "cadre" of emerging leaders (Foster-Fishman et al. 2001). Strengthening of community leadership is the challenge confronting government in Australia in its current operating environment of diminishing resources. For communities, this is further complicated by the changing "face" of government agency participants and restructuring (Stocker & Pollard 1994). The value of leaders is increasingly recognised by government, with attention to fostering greater community leadership, and investment in developing and training "champions" of natural resource management (National Natural Resource Management Task Force 1999). Likewise, the United States government is seeking to "build leadership capacity within the community so that the agency's role is not so central" (Wondolleck &Yaffee 2000, p. 179).

Partnerships and Collaborative Arrangements

As Sinclair and Smith (1999, p. 121) acknowledge, "contemporary sustainable development theory recognizes the need for participants in resource management issues to work in partnership to build consensus on options for moving forward". Partnerships are the third key element of participation explored in this thesis. Due to the majority of partnership arrangements involving government and community partners, the discussion is centered on community-government partnerships. Government and communities working together in partnership provides the means for helping achieve an appropriate balance between community empowerment and democratic accountability (Curry 2001). Partnerships help with accountability issues by providing better "scrutiny" of actions and performances of partners as participants undertake collaborative activities. The capacity of partners to collaborate, known as their collaborative capacity, is greatly influenced by the skills, knowledge and attitudes participants bring to the decision-making/negotiation table (Foster-Fishman et al. 2001).

There are many arguments favouring partnerships in planning and implementation. A successful partnership will transform relationships between participants, foster new understanding, resolve environmental conflicts and stimulate future collaborations (Wondolleck & Yaffee 2000). Partnerships between participants also allow for the formation of shared understanding between partners in situations of complex social dynamics (Johnson & Wilson 2000). Other benefits are gains in terms of increased inclusive processes, where stakeholders have a positive stake in their success and an avoidance of exclusion and fragmentation. The cost-effectiveness of participants taking action and ownership of decision outcomes is an added benefit (Johnson & Wilson 2000).

Therefore, it is no surprise that partnerships and collaboration between participants continues to receive attention from resource managers and governments.

A major challenge confronting community-government partnerships is bridging the divide between government agencies and communities. Friction often results from differing levels of accountability and responsibility being carried by partners. This may occur when government agencies or organisations are held accountable, while non-government groups and organisations may not be accountable (Michaels 2001). Another difficulty encountered in creating and maintaining partnerships is that "different patterns of representation and participation affect decision-making within each [member] group, which may in turn present problems for decision-making in the coalition" (Couto 1998, p. 569). Wondolleck and Yaffee (2000) present a comprehensive array of the challenges confronting collaboration that span: basic human dilemmas of cooperating; institutional structures supporting collaboration; attitudinal and perception barriers held by individuals, groups and organisations; and process-related problems with organising.

Maintaining the engagement of local citizens and organisations is difficult due to volunteer burnout. In Australia, there increasing evidence of burnout in some natural resource management partnerships, attributed to feelings of low personal accomplishment and emotional exhaustion (Byron & Curtis 2002a). Obstacles and challenges are experienced not only by community partners, but also by government agencies and their personnel.

1.5 Natural Resource Management in Australia

Pursuit of Sustainable Development

The Commonwealth government discussion paper, "Managing Natural Resources in Rural Australia for a Sustainable Future", seeks to provide the "basis for sustainable production,

healthy ecosystems … and viable rural communities … the wellbeing of the nation and of future generations depend on sound use and management of our natural resources" (National Natural Resource Management Taskforce 1999, p. 1). Natural resource management in Australia is undertaken within a context provided by sustainable development (Commonwealth of Australia 1992a). More recently, production as part of natural resource management, has been grounded in sustainability (National Natural Resource Management Taskforce 1999).

Complexity of Natural Resource Management

A number of writers draw attention to the complexity and wickedness of natural resource management issues (c.f. Allen & Gould 1986). One reason given for the difficulty in analysing natural resource management problems is the inability to disaggregate these issues, for example, salinity problems involving hydrology, geology and ecology across landscapes. Another key reason for intractability is that most issues are value-laden, with no right or wrong solutions, but only ones that have "good" or "bad" outcomes for different stakeholders. Usually, multiple stakeholders with very different interests are involved. Wicked problems often contain interrelated problems which can not be dealt with in isolation to other problems or permanently solved. Often only temporary solutions are available because of the dynamic nature of the social and ecological environments in which natural resource management occurs.

The realm of natural resource management is characterised by stakeholders with diverging values and objectives over resource use and allocation, often resulting in conflict between stakeholders. Complicating attempts at dispute resolution is the nature of the issues, which are described as scientifically complex; with irreversible effects; high uncertainty over success; involving a diverse range of public and private vested interests; and centered on

ideological differences (Smith et al. 1997; Smith 1993; Cocklin 1988; Bidol & Lesnick 1984). The environmental dispute resolution literature emphasises the greater likelihood of resolving disputes occurring at small spatial scales (local or regional), compared with State or national-based altercations (Moore & Bache 1997). Irrespective of the spatial scale of conflict, the most critical feature contributing to successful dispute resolution is the presence of all decision-makers during negotiations and decision-making (Bingham 1986).

Australia is a federated nation of six States and two territories. Responsibility for natural resource management rests with three tiers of government: federal, State and local. Local government is organised on a Shire or province basis. Although responsibilities for land management rest primarily with the States, the federal government has an on-going interest in natural resource management (Jennings & Moore 2000). At the national scale, the federal government is predominantly responsible for overarching legislation and funding to underpin policy, and a move towards participatory resource planning (Johnson & Walker 2000). At the State level, the governments in Australia are responsible for environmental protection, including managing protected areas and resource production sectors (e.g. mining, forestry, fisheries) (Jennings & Moore 2000).

Within individual Australian States and Territories, responsibilities for managing natural resources often rests with more than one government agency, and this fragmentation of authority may impede cooperation. Using the example of managing the adverse effects of dryland salinity in Western Australia, four State agencies share administrative responsibility, while there is a scarcity of financial and human resources for management.

Interorganisational conflict has been an ongoing feature of natural resource management in Australia (Walker 1992). Part of this is grounded in conflict between the different tiers of

government, particularly between the Commonwealth and State governments, where jurisdictional responsibilities are often blurred. However, conflict between States, such as that surrounding management of the Murray-Darling River system, is also legendary. Much of the conflict is based on competition for resources, and jurisdictional uncertainties and overlaps (Jennings & Moore 2000).

Effective Organisational Arrangements

Knowledge about effective forms of human organising is as important as knowledge about the biology or hydrology of a system (Lee 1992). Contributions from social science are necessary for the institutionalisation of sustainable natural resource management to supply a greater understanding of the appropriate scale at which to organise and form social organisations (Lee 1992). While the science of human organisation in ecosystems is far less developed, it remains an essential component of any solution. Natural resource management decisions can be characterised as social decisions involving decision-making processes surrounding the allocation of social resources in a social environment. As such, an understanding of the social aspects of ecosystems and organising is vital, such that "sustainable [watershed] management begins by building ecologically effective human organizations" (Lee 1992, p. 87).

Management of natural resources in rural Australia has involved people managing private farmlands and public assets; with privately managed lands in Australia forming 70 % of the continent's land area (Gardner 1999). Natural resource management is therefore seen as both a public and a private responsibility in Australia. The natural resource management framework consists of a plethora of groups and individuals, including: Commonwealth, State and local government, private landholders, and industry and non-government groups. Development of natural resource management in Australia has experienced a much

stronger and dominant government process than that of the United States with its lobby and non-government groups. Although private landholders manage farmland, some States in Australia have legislated controls to prevent and reverse impacts of land degradation (biodiversity loss, soil erosion) on these properties. Across parts of Australia, Indigenous natural resource management has been practiced historically, and continues to the present day.

Over the last two decades, paradigms supporting participatory and sustainable natural resource management have evolved in Australia, challenging past philosophies and practices. Paradigms represent a framework for our current understanding, assumptions and propositions. It is a structure that is continually challenged and changed as our knowledge and understanding expand (Brown & Harris 1992; Milbrath 1984). Johnson and Walker (2000, p. 82) note this emergence saying, "sustainable resource use and participatory democracy have emerged as increasingly influential paradigms in the evolution of approaches to natural resource use planning and management." This emergent participatory paradigm is increasingly incorporating consultative and participatory planning and decision-making, with decentralised decision-making authority.

Scales of Decision-Making and Organising

Currently planning and management for sustainable development are carried out on a variety of geo-political and bio-geographical scales, ranging from international to local community levels. The success of these activities is difficult to determine, leading to questions about how we can improve the implementation of sustainable development, and the consequences of decision-making for natural resources management at different geo-political scales. Spatial scale as a platform for natural resource management has only been

examined from a biophysical aspect (Smith & McDonald 1998), not in terms of the social aspects of decision-making.

Dealing with natural resource management issues, such as land degradation in its various forms and levels of severity, requires coordinated policy-making, planning and management across numerous spatial scales. Natural resource problems transcend administrative and political boundaries and requisite actions extend beyond individual properties, necessitating a multi-scale approach to sustainable development. Of paramount importance is effective organising at all scales of natural resource policy-making, planning and management. A closed system approach no longer exists. In its place is a dynamic adaptive system that must encompass at least several spatial scales of organising.

Integral to sustainable natural resource management in Australia is achieving a "sustainable" agricultural sector. The total area of agriculture occupying the Australian continent is estimated at 455.5 million hectares, representing about 60% of the total land area (Australian Bureau of Statistics 2003). Such sustainability contributes to Australia's long-term productivity and economic well-being, and protects the biological and physical resource base on which agricultural industries depend (Department of Agriculture 2002). In this country, decisions affecting sustainable agriculture are made at six spatial scales, including the national, State (providence), regional, local government (shire, county), subcatchment, and individual landholder. This study examines decisions within the State, regional, Land Conservation District (LCD)[5] and subcatchment. These scales represent areas determined by geographical, institutional and social boundaries. There is particular relevance in examining decision-making groups at these scales to provide a holistic picture

[5] Land Conservation Districts are aligned with local government boundaries and designated under the *Soil and Land Conservation Act* (1945) (Western Australia).

of decision-making for social sustainability that incorporates legislated and community-led voluntary structures.

National scale

In Australia, the release of the National Strategy for Ecologically Sustainable Development (Commonwealth of Australia 1992a) in 1992 was followed by national commitments to address the issues of biodiversity, greenhouse gas emissions, and oceans and wetlands protection, to name a few goals. Supplementing these national policies have been numerous programs directed at addressing land degradation and biodiversity loss problems in rural and regional Australia. The National Dryland Salinity Program (1993-1998, 1998-2003)(as cited in Commonwealth of Australia 2002) and more recently the National Action Plan for Salinity and Water Quality (2000)(as cited in Commonwealth of Australia 2002) are comprehensive national strategies to address salinity and water quality problems. They aim to change management practices and secure greater investment in the rehabilitation at the property, local, catchment and regional levels to reduce the rate of natural resource decline.

While environmental protection and management are the prime responsibility of State governments in Australia (Bates 1995), the federal government strongly influences State activities through its funding of natural resource management initiatives. The National Landcare Program initiated in 1989, and more recently Natural Heritage Trust (1997 to present), are two such federal initiatives to fund natural resource management education, demonstration activities and on-ground work. The Natural Heritage Trust was established to restore and conserve Australia's environment and natural resources (AFFA & Environment Australia 2002). Associated funding has been directed towards improving water quality, estuarine health, vegetation management and soil condition, and reducing

erosion at subcatchment, regional, State and national levels (AFFA & Environment Australia 2002).

The Australian Landcare Program[6] has been instrumental in mobilising government agency and community involvement in natural resource management. Landcare[7] is a "catalytic program" (Curtis et al. 2000) bringing together governments and communities to work at solving natural resource management problems at the local scale (Campbell 1992). Most often, it has focused on small groups (<10) of farmers working collectively to address land degradation issues such as topsoil loss and salinisation of soil and water resources.

The operationlisation of community Landcare has been described as a participatory action model (Chamala 1995), and as the dominant policy paradigm in Australian natural resource management (Cary & Webb 2000). Community Landcare has promoted self-reliance, developed social capital and empowered community groups to manage resources through sustainable practices (Frank & Chamala 1992; Vanclay 1992). However, there has also been a lot of criticism about the weaknesses of performance and actual effectiveness of Landcare, and other initiatives delivered through the Natural Heritage Trust, in the face of powerful bio-physical degradation forces (Australian Conservation Foundation 2000; Haworth 1997; Lockie 1997).

Participation in Landcare across Australia has seen on-ground changes through the adoption of best management practices to address land degradation, as a result of communities' increased awareness of issues, and greater skills and knowledge (Curtis &

[6] The years from 1990 to 2000 were declared the 'Decade of Landcare' by the Australian Soil Conservation Ministers in 1989. The Commonwealth and all the States and Territories developed the Decade of Landcare Plans, which aimed to reverse and prevent land degradation and promote sustainable land use.

[7] A detailed account of the Landcare Program conception, function, activities, limitations etc. is provided by Barr and Cary (2000), Cary and Webb (2000), Curtis et al. (2000), and Commonwealth of Australia (1999) and will not be covered in the scope of this chapter section. Curtis et al. (2000) also evaluate the effectiveness of the Landcare Program and evaluations conducted by other researchers.

De Lacy 1996). Landcare groups are credited with the success of enhancing citizen competency, developing networks, supporting sustained representation and being a repository of knowledge (Curtis et al. 1999). While the Landcare Program is sited at subcatchment scale, it connects with and encompasses all scales of organising for natural resource management in Australia.

State scale

Natural resource management at State scale functions to provide policies to guide government and community programs, and implement Australia's national and international obligations. All States and Territories are committed politically to the Commonwealth's National Strategy for Ecologically Sustainable Development (1992) through endorsement, and as signatories to the Inter-Governmental Agreement on the Environment (Commonwealth of Australia 1992b), thereby formalising their intent to uphold the encapsulated principles. Although States translate national policies into a range of administrative and institutional operations, there is no Australia-wide administrative natural resource management framework, and no single statutory regime for managing land, water or biodiversity resources (Gardner 1999).

In Western Australia, the role of the State is a mix of policy-making, and establishing regulatory frameworks and processes. The State's single natural resource management policy document is the State Salinity Strategy (Government of Western Australia 2000a); a "whole of government" approach, and response to salinisation and loss of productive land in the agricultural regions of Western Australia. In 2002, the government established the natural resource management council (a non-statutory group) to provide high-level policy advice on natural resource management to the Western Australia Cabinet Committee on the Environment. One of the roles of this council is to advise the government on

implementation of the State Salinity Strategy.[8] Another is to provide leadership in developing a natural resource management strategy for Western Australia.

The State's natural resource management framework for land and water management is described as an evolving framework with several "rudders" and multiple parties, including State government agencies and formal peak bodies bestowed with specialised responsibilities (Gardner 1999). Consequently, this ad hoc framework is stymied by government agencies that have conflicting and overlapping functions, and replicate similar processes for the performance of their functions (Gardner 1999).

For many years, natural resource management advice has been provided to the Western Australia government by the statutory Soil and Land Conservation Council, which also report to the Cabinet Committee on the Environment. The Council represents community, industry and government, and aim to provide leadership, strategic advice and coordinated efforts to address natural resource issues, such as salinity, across the State. The council has an agricultural focus, aiming to ensure the future usability of Western Australia's agricultural resources through ecologically sustainable and economically viable management, in conjunction with management and conservation of biodiversity (Government of WA 2000). In the absence of any overarching natural resource management legislation, current State legislation implements actions for sustainability of agricultural natural resource use (e.g. *Soil and Land Conservation Act* 1945 (WA), *Wildlife Conservation Act* 1950 (WA), *Environmental Protection Act* 1986 (WA), *Conservation and Land Management Act* 1984 (WA)). The Soil and Land Conservation Council is one focus of this study.

[8] This Strategy was prepared by the State Salinity Council, a non-statutory group advising the State government over the period 1997-2002 on salinity issues, and is now replaced by the Natural Resource Management Council.

Regional scale

A diversity of definitions exists for the concept of a "region" in Australia, and elsewhere in the United Kingdom, United States and Europe (Jennings & Moore 2000). In Australia, it is used interchangeably with basin, catchment, and subcatchments, while in the United States, the term covers river basins and ecosystems. Regions may be larger than a watershed, and include municipalities or counties. For example, a large eco-region would be the Greater Yellowstone Ecosystem. In the United Kingdom the term river catchment or watershed is used to refer to regional systems. The European equivalent to region can encompass a number of countries, and reference is made to nations of the region. Regional planning in Germany equates with sub-regional planning in England (Marshall 1998). A significant difference between these definitions is the scale disparities.

In Australia, a region can vary in size from a small subcatchment through to large catchments or watershed. For example, Australia's largest catchment, the Murray-Darling River Basin, crosses several State borders and covers 1,061,469 km^2, which is equivalent to 14% of the country's total land area (Murray Darling Basin Commission 2003). In the Murray Darling Basin there are 51,672 farms (Murray Darling Basin Commission 2003), but in the Blackwood Basin in Western Australia there are approximately 2,000 farms over the 22,000 km^2 of the region (Blackwood Basin Group 2003). Also, a region is not always based on catchments or hydrological boundaries, but may be formed on administrative boundaries.

The scale diversity of a "region" comes as no surprise, given the different political, economic and scientific approaches of each nation. In Australia, a region is an area that has meaning for stakeholders, and is practical for management. The range of definitions gives consideration to the natural landscape features (catchments, ecosystems / land systems)

and socio-economic support structures (community, industry, government) (c.f. Dore & Woodhill 1999).The similarity shared by Australia, the United States, New Zealand[9] and the United Kingdom is that regions comprise one or more local government authorities, local councils or counties. This is not surprising given Australia has adopted the Westminister system of governance. However, it appears that European and English regions have extensive systems of regional governance and associated structures, in contrast to a less developed model in Australia.

In Australia and elsewhere, regional approaches to natural resource management are being increasingly advocated by community and government alike as the scale on which to base planning and management decisions. *Regionalisation*, a term meaning decentralisation of central government services to regions, has been the predominant driver of regional planning in the United Kingdom and European Union, and more recently in Australia. In regionalisation, government or industry form administrative regions to provide more efficient mechanisms for management and delivery. In Australia, power is devolved from central administration to regional managers (Dore & Woodhill 1999).

In contrast to regionalisation, regional governance may be community rather than government initiated and driven. Through *regionalism*, communities have greater influence and participation in decision-making, often in the form of multi-party partnerships involving government, community and industry (Dore & Woodhill 1999). A key feature is connectedness across scales. In terms of regionalism, Australia's now significant history of organising for Landcare provides a strong base for regionalism.

9 In New Zealand, the *Resource Management Act* (1991) exists to make decisions about the sustainable management of New Zealand's natural and physical resources at three levels, including: national, regional and district/city. Fundamental to the *Resource Management Act* (1991) is sustainable management of natural resources at regional scale by regional councils. Regions are defined around bioregions.

Regional governance in Australia has featured both regionalisation and regionalism. Regionalisation has proceeded along predominantly economic and administrative paths (Dale & Bellamy 1998). Current practice is to define regions on the basis of administrative and economic factors, as opposed to bioregional ones (Dale & Bellamy 1998). However, implementation is problematic because there are no established jurisdictions, and there is a lack of congruence of local government boundaries with logical natural resource management regions and catchments (Virtual Consulting Group and Boorara Management and Consulting 2000). Much regional organising in Australia is founded on voluntary organisations outside statute law, with limited formal powers, autonomy or security of funding. A major reported weakness of these past and current regional planning models is their failure to recognise the diversity of regions and their associated regional organisations (Roberts & Lloyd 1999; Dale & Bellamy 1998).

Both regionalisation and regionalism involve the shifting of decision-making powers across scale, to empower individuals and communities and engender cooperation. In working within regional boundaries, however, there is a need to deal with the complicating factors of endemic disagreements, incoherence inherited with existing boundaries and creating a culturally meaningful structure for local communities (McGinnis et al. 1999; John & Whitehead 1997). Moves to regional governance of natural resource management are providing regional communities with greater participation and influence in natural resource management in their regions and further afield (Dale & Bellamy 1998).

Most current approaches and philosophies to regional natural resource management in Australia have their origins in catchment management, and the associated Landcare movement. In some places, these approaches are formalised in some case through legislation; in the States of Victoria and New South Wales legislation guides regional

catchment planning and management. In other States, regional natural resource management has evolved through State policy and local action rather than legislative initiatives. Such is the case in Western Australia, where regional planning for sustainable agriculture was adopted by the State government in 1995 through the Sustainable Rural Development Program (Department of Agriculture 2000), and administered by Agriculture WA (a State government agency). This program aims to achieve sustainable development of farm businesses, rural communities and agricultural industries so they are capable of meeting economic, ecological and social challenges, consistent with national goals. Catchment management is also a key concern. Implementation is via a steering committee, reporting to the State Minister for Primary Industry.

An integral part of the Sustainable Rural Development Program has been the formation and support of regional partnership groups in the agricultural regions of Western Australia (Figure 1.2). These regions are administratively determined by the Department of Agriculture (Department of Agriculture 2000). Their formation is an example of regionalisation. The associated regional partnership groups are comprised of community people appointed on the basis of expertise to inform government policy, planning and management and representatives from government. One concern with this model is the potential loss of “community” due to the absence of representatives elected by community. Recommendations are made jointly, by the government and community members of the regional partnership group, to the State Minister for Primary Industries.

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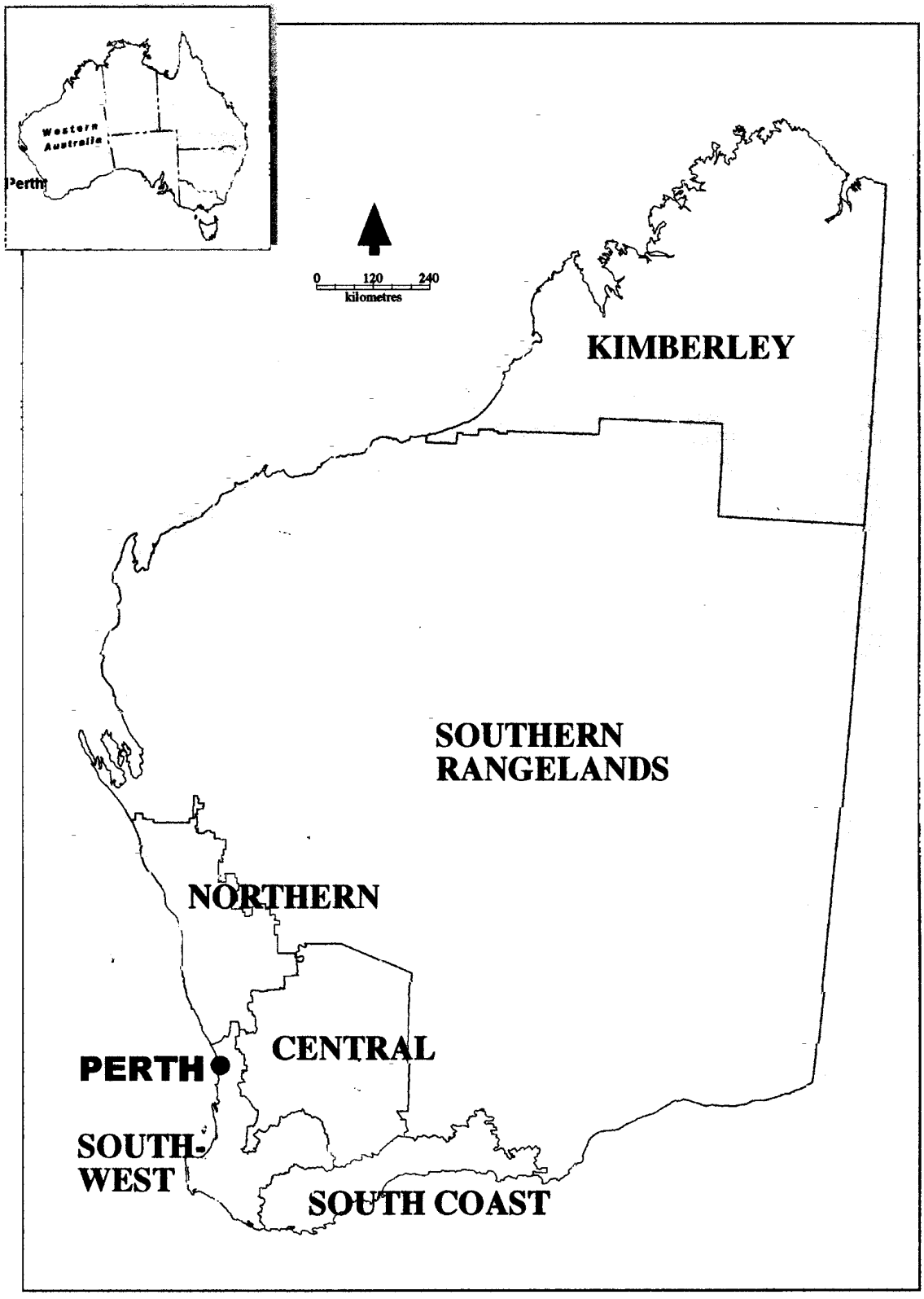

Figure 1.2 Sustainable Rural Development Regions of Western Australia.

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The other from of regional organising associated with agriculture and broader natural resource management issues is much more community driven towards the regionalism end of the spectrum. Over the last 15 years or so years in Western Australia, and across other parts of Australia, a number of regional groups have formed, predominantly as a means of organising to attract Commonwealth and State government funding. These regional structures have been created to apply community knowledge and technical expertise to regional decision-making. However, as indicated by Gardner (1999), this proliferation of regional organisation suffers from a lack of legitimacy. In not being democratically elected from the broader community, there is a question of their right to make political choices concerning natural resource management, and their role in allocating substantial amounts of public funds (Gardner 1999). In Western Australia, there are a large number of community-led regional groups who have developed regional strategies through the collaborative efforts of stakeholders (e.g. Blackwood Basin Group, Avon Working Group, South Coast Regional Initiative Planning Team). The regional boundaries of these groups are catchment-based, and membership is mainly community-led, although members of government departments are also involved. Two of these groups are an important focus of this study.

Regional organising enables tailoring of solutions to the diverse landscapes and natural resources across Australia, to meet regional conditions and circumstances, thus enhancing the prospects of achieving sustainable development (Jennings & Moore, 2000). Economies of scale in regionally providing natural resource management have been recognised and promoted over the past few years (Woodhill 1996). Dore and Woodhill (1999) perceive regions as important entities as they “mesh” processes and reconcile scales of operation to unite community participation with government. Simply, it is seen as the optimum scale

"at which social organisation and institutional interaction and coordination can be more adaptive" (Dore & Woodhill 1999, p. 10)

Regional natural resource management is in its youth in Australia, and competition is occurring between regions and government over resources, resulting in jurisdictional uncertainty and overlap. This period of regional development is characterised as a "settling down" period, when boundaries of responsibility and roles are renegotiated between relevant State government agencies, and between community and government organisations (Jennings & Moore 2000). Organising regionally involves a mix of formal, informal and tacit arrangements between individuals and groups, and an associated understanding of working within those guidelines. Current natural resource management in the regions across Australia consists of community action coupled with political and social commitment. A number of other studies provide more detail and in-depth discussion of regional planning and management (Jennings & Moore 2000; Dore & Woodhill 1999; Dale & Bellamy 1998).

LCD scale

In Western Australia in 1988, Land Conservation Districts Committees or more commonly LCDCs were created through an amendment to the *Soil and Land Conservation Act* 1945 (WA). Land Conservation Districts (LCDs) are specific to Western Australia. They are a level of organising similar to local government,[10] and are based on local government boundaries. However, these LCDs may also consist of more than one Local Government Authority. The statutory establishment of LCDCs under the *Soil and Land Conservation Act* 1945 (WA) in 1982 provided for local forums. These allowed landholders to coordinate subcatchment planning and management, specifically in relation to salinity and

[10] Local Government Authorities have a much broader function, which encompass infrastructure development and maintenance, local government regulations, and economic and community services. They are the third and "lowest" tier of government in Australia.

drainage issues. These committees include local community members from various production enterprises and subcatchment groups, and local and State government. These committees have allowed communities to control their own destiny and combine resources and expertise, access funds and knowledge, and provide an umbrella for the formation of subcatchment groups (Dare 1990). Two LCDCs are included in this study.

Formal legislative functions of the LCDC are outlined in section 24 of the Act. Covered functions are land use, land degradation and soil conservation, including consideration of notifications of intent to clear or drain. An important function is providing Landcare education to assist in prioritisation of farm and catchment planning. Other informal roles include landholders demonstrating their commitment to solving land degradation to politicians and garnering their support. In addition, roles include facilitating community leadership in improved natural resource management, and improving understanding of land management problems. Concerns regarding land degradation impacting the economic viability of farming enterprises have been a strong motivating factor for participation (Dare 1990).

In the past, LCDCs have had opportunities to access funds for Landcare activities, but resources for Landcare projects are now being delivered to subcatchments through regional mechanisms. The exception is the allocation of funds to LCDCs for community Landcare coordinators[11] to support subcatchment groups. Landcare coordinators and facilitators have placed a pivotal role in progressing and implementing the National Landcare Program, and subsequently the Natural Heritage Trust (Frost & Dymond 2000).

11 Community Landcare Coordinators are also referred to as Landcare Coordinator and Facilitators, and increasingly as Community Support Officers (Frost & Dymond 2000).

Subcatchment scale

Much of the 1990s was devoted to natural resource management activities through Landcare at a subcatchment level, involving groups of landholders and comprising about 38% of the farming population (Wiseman 2001). The basis of action at this scale has been the Landcare program's community participation approach to rural development (Curtis et al. 1995). State government personnel from natural resource agencies have also engaged with a large number of community groups and interact with many small groups of landholders across the rural landscape. Landcare, as a model, advocates and support partnerships, and traditionally this has been between State government agencies and communities. Attention at this scale has focused on small groups (e.g. 10-18 farming families) as a means of influencing individuals' actions, and to bring about change at a farm scale.

Integrated catchment management is a widely used approach in Australian environmental management to facilitate participatory planning within catchments and subcatchments. First introduced as State policy in Western Australia in 1988 to address land and water degradation, integrated catchment management strategies can be implemented at regional and subcatchment scales. Integrated catchment management is a "holistic" natural resources management system comprising interrelated elements of land and water in a catchment, managed on an ecological, social and economic basis.

Described alternatively as a "philosophy, as a process, and as a product" (Mitchell & Hollick 1993, p. 737), integrated catchment management has been implemented around the world. Its philosophy, and that of total catchment management and other activities, such as Landcare, is forging an organisational culture that is participatory, with cooperation among 'everyone' (Lockie 1997). The 'everyone' includes Aboriginal communities, the corporate,

State and local governments, and landholders. As a process, integrated catchment management aims for cooperation between stakeholders to take collective action to manage natural resources in their catchment. As a product, integrated catchment management seeks to facilitate the development of catchment management plans for making informed decisions (Mitchell & Hollick 1993).

Integrated catchment management is referred to as total catchment management in New South Wales. Within the legislative framework of the *Catchment Management Act* 1989 (NSW), total catchment management was defined as the "co-ordinated and sustainable use and management of land, water and vegetation and other natural resources on a water catchment basis so as to balance resource utilisation and conservation" (Booth & Burgin 1997, p. 29).

1.6 Public Participation in Natural Resource Management

A participatory culture has been strongly advocated for natural resource management in Australia (Bellamy & Johnson 2000). Community participation is considered an essential element in managing complex and long-term environmental problems affecting biodiversity and resource productivity. In Australia, the main scale of community involvement in natural resource management has been at the subcatchment level based on Landcare groups, which predominantly consist of small groups of rural landholders concerned with farm-scale sustainable agricultural production. Public participation is an expected and integral part of planning and managing natural resources by governments. Citizen involvement in policy development and program performance of government-funded programs is part of the current planning culture, and allows communities and recipients of project outcomes to "have a say" (Syme 1991). Additionally, most of the lands being managed are privately owned. Implementation, therefore, relies on the support

and actions of private landholders, best secured through active participation (Moore et al. 2001).

The federal government's Natural Heritage Trust program and integrated catchment management initiatives have been more recent vehicles for enhancing public participation in natural resource management. Participation in Landcare activities to implement integrated catchment management plans has produced positive benefits at the individual and community level, and contributed to the heightened adoption of sustainable practices (Curtis & De Lacy 1996; Alexander 1995). Integrated catchment management and the Natural Heritage Trust seek to build partnerships between communities and governments by inclusive and participatory approaches at regional and subcatchment scales. The Natural Heritage Trust supports existing community efforts, and helps people play a key role in their future activities (AFFA & Environment Australia 2002).

The desired outcome of the Natural Heritage Trust is empowerment of communities to invest in and take responsibility for ecologically sustainable management (Mack & Stephens 2002). "Taking responsibility" is dependent on some level of empowerment. For citizen empowerment[12] to occur, there also needs to be a culture of governments transferring power to citizens. This is often not the case with government professionals seeing few benefits in sharing power with those perceived as having limited skills and abilities in areas traditionally administered by professionals. While the Australian federal government is encouraging a partnership approach between governments and regional communities, this does not necessarily equate to a transfer of power, although power sharing may result (Rocha 1997)

[12]as per the previous definition and discussion of empowerment

CHAPTER 2.

RESEARCH DESIGN AND METHODS

2.1 Introduction

This chapter covers the research design, methods, data collection and analysis adopted to study public participation in decision-making by groups for sustainable natural resource management. Explanatory case studies were investigated via a multi-case design (Yin 1994), enabling both single and cross-case analyses. Data collection involved semi-structured interviews, participant observation and compilation of documents. The chapter concludes with a critique of the study's validity and reliability.

2.2 Research Design

This research was case study based. The design features are summarised in Table 2.1.

Studying Decision-Making Through Cases

I used a case study strategy, which "explores a single entity or phenomenon (the case) bounded by time and activity (…process…or social group) and collects detailed information by using a variety of data collection procedures during a sustained period of time" (Creswell 1994, p. 12). Case studies allow individual cases to be understood in detail; with later generalisation from the case to broader principles, combined with the unique circumstances and context of each specific case (Carroll & Johnson 1990).

Table 2.1 Components of the Research Design.

Components of the Research Design	Study Details
Research Question	How well do current forms of organsing for making natural resource management decisions at a range of spatial scales in agricultural south-western Australia perform in terms of sustainability?
Research Objectives	Define and describe the relationships between social sustainability, participation in decision-making as a central tenet, and representation, leadership and partnerships as key features of participation. Categorise and analyse the characteristics of representation, leadership and partnerships at four spatial scales from State to subcatchment. Evaluate, using respondents' criteria and comments, how well representation, leadership and partnerships performed at each of these spatial scales. Determine, drawing on this evaluation, the strengths and weaknesses of decision-making, as a central tenet of social sustainability, at different spatial scales. Review, based on previous research and this study's findings, the features of such decision-making that support social sustainability.
Case Study Design	Multiple-case studies which are explanatory with concurrent partial literal and theoretical replication. Ten cases were used.
Unit of Analysis	Decision-making by each natural resource management group.
Data Collection	Concurrent data collection for ten case studies using interviews, participant observation and documentation.
Data Analysis	To direct on-going data collection and analysis, an iterative approach was employed to link the empirical data to emerging theory, using an inductive-deductive cycle. Grounded theory was used to conceive ideas and organise them into a logical and explanatory scheme (Strauss & Corbin 1998). Within and cross-case analyses were undertaken assisted by NUD*IST software.
Interpretation of the Findings	Theoretical idea(l)s developed from the data will allow extension of the current findings to inform sustainable natural resource management research and practice elsewhere.

Selection of a case study strategy was based on the following reasons:

(1) The research question was focused on contemporary events as opposed to historical ones. The contexts of the events were also important. In addition, experimental control over the behavioural events was not possible (Yin 1994). The research questions at the centre of this study were in the form of "how" and "what" questions. The case study approach is useful for describing *how* decisions are made, *how* organising and decision-making supports social sustainability, as well as explaining *what* scales are best for organising and decision-making and *what* are the features that support social sustainability. Participant observation and systematic interviewing were conducted to examine contemporary events in situations where behaviours could not be manipulated (Yin 1994).

(2) Decision-making and decision-making processes are complex phenomena for study. A case study approach allows a holistic view to be taken (Feagin et al. 1991). A case study strategy allows integration of multiple sources of evidence, with an emphasis on both process and context.

(3) A case study approach focuses on generating rather than testing theory (Feagin et al. 1991). As little work was available to generate a priori hypotheses, the exploratory nature of the research was best suited to building theory. Case study research has "explanation-building" (Yin 1994) as a mode of data analysis, which is well suited to the grounded theory process (Strauss & Corbin 1990) of constantly comparing incidents with incidents until categories emerge (Creswell 1994).

The case study approach in this study was characterised by:

- substantial time spent with each case;
- attempts to understand the context of the case by collecting historical and situational information;

- verification through checks of convergent validity where key questions were asked in various ways and answers drawn from different sources;
- internal consistency and meaningfulness of the information were the focus, rather than comparing theories; and
- the quality of the result depended on the researcher's ability and the relationship built between the researcher and participants (Carroll & Johnson 1990).

The case study design was explanatory, as the research questions asked "how" questions regarding decisions (Table 2.1). The case study strategy relies on analytical replication rather than dealing with statistical samples. Conducting ten case studies arranged within a multiple-case design is analogous to conducting ten experiments. Each case study group can be regarded as a separate experiment, with the multiple-case design following a replication, not a sampling logic (Yin 1994). As a sampling logic was not used typical criteria regarding sample size are irrelevant. Multiple, replicated cases allowed for theory building.

Multiple Case Studies

A multiple case design was used for two reasons; firstly to cover the four different spatial scales, and secondly, to use replication within scale to build theory. A multi-case study design uses literal replication to predict similar results, as opposed to theoretical replication that produces contrasting results but for predictable reasons (Yin 1994). Partial literal replication was achieved by replicating within scale three of the four scales studied (Table 2.2).

Table 2.2 Case Study Groups.

Spatial Scale/Area		**South-West**	**Central Agricultural**
State		Soil and Land Conservation Council	
Regional	**Government-led**	South-West Regional Partnership Group	Central Agricultural Regional Partnership Group
	Community-led	Blackwood Basin Group	Avon Working Group
Land Conservation District		Dumbleyung Land Conservation District Committee	Goomalling Land Conservation District Committee
Subcatchment		Fence Road Catchment	Wallatin Creek Wildlife & Landcare Inc. Gabby Quoi Quoi Catchment

Literal replication was sought at the regional, LCD and subcatchment levels, with two cases each selected from the LCD level, three from the catchment level and four from the regional scale. Four were selected here to obtain two cases each where the groups were products of regionalisation (government-led) and of regionalism (community-led) (Table 2.2 and Figure 2.1). Literal replication was not possible at the State scale given that the only other State-level natural resource management group the State Salinity Council was closed to attendance and therefore research (scrutiny) by non-members.

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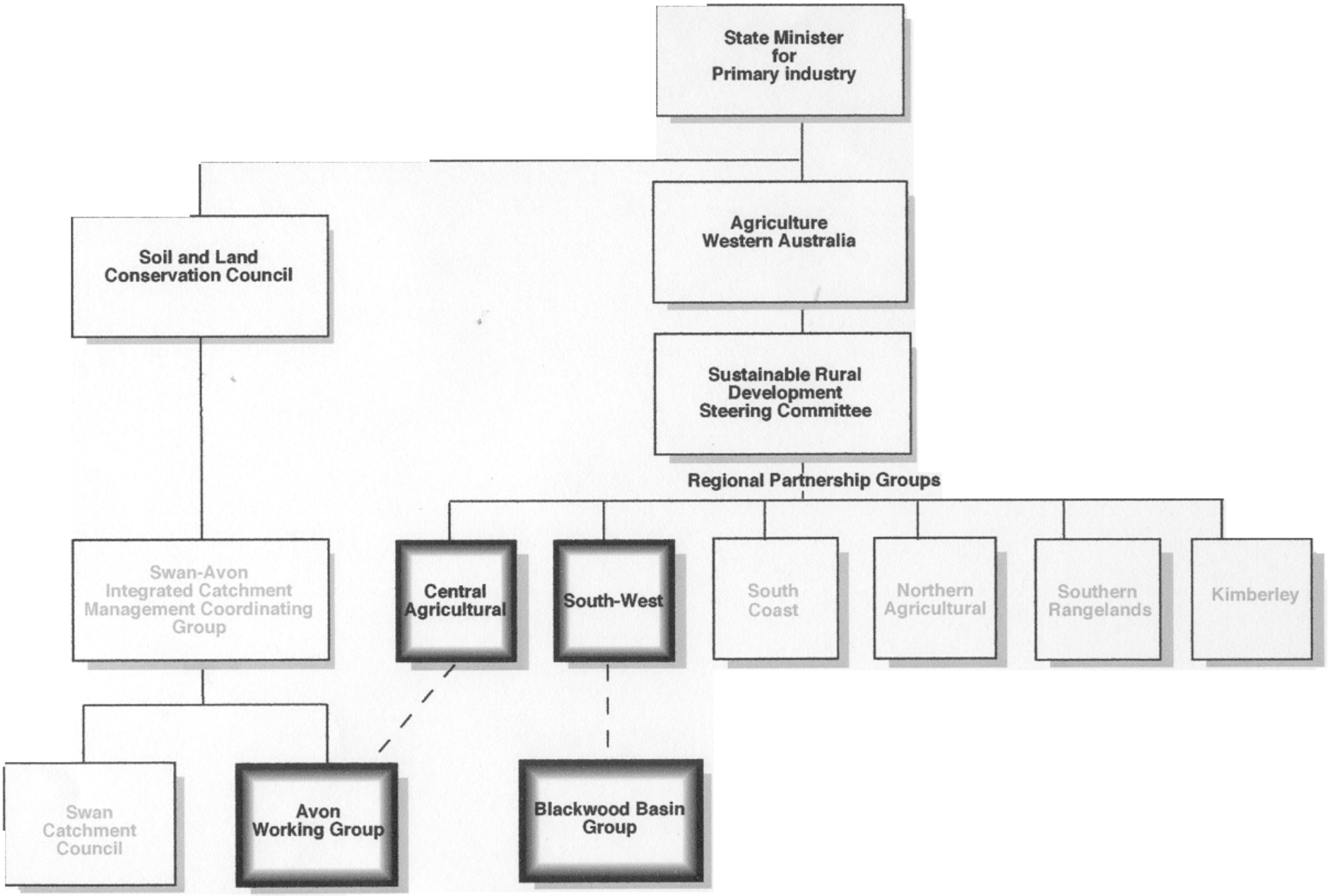

Figure 2.1 Management Structures for Case Study Regional Groups.

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Theoretical replication, with contrasting results being predicted because of differences in scale, was achieved by studying cases across the four spatial scales. This combination of literal and theoretical replication allowed robust explanations to be built at each scale, through empirical observations, and then comparisons to be made between scales. The ultimate aim of these comparisons was to build theory, enabling the findings to be generalised to other natural resource management settings. In terms of theoretical generalisability, this case study strategy also sought to contribute to theory building, associated with representation, leadership and partnerships.

Unit of Analysis

The unit of analysis was decision-making by each of the natural resource management groups. A particular focus was participation in decision-making by the group and specifically participation by group members. Participation by non-members was not included. Participation was considered in terms of representation, leadership and partnerships.

Case Study Protocol

A case study protocol was used to guide and document the research process. The areas of the protocol covered: research design, background description of the case, data sources, collection schedule, interview questions, analysis technique(s), and preliminary structure of the dissertation. A protocol can be used to increase the reliability of the research (Yin 1994). Requirements to meet human ethics were covered, through participant consent documentation, safe and secure storage of data, and the maintenance of participant confidentiality. Written consent forms, including a statement about the research and the information to be collected, were used.

A standard interview protocol was used in conducting interviews and included: procedural reminders (e.g. signing of consent form), instructions to the interviewer, opening statement to the interviewee, key questions to be asked and associated probes. An audiotape was used to record all interviews. If important points addressing sustainability of practices arose during the interview, these were noted at the time and pursued in subsequent interviews.

Pilot Study

Prior to data collection, a pilot study was conducted for two reasons. First, it was important to refine the interview questions and data collection format, and further clarify the conceptual basis of the research design. Second, use of the pilot study provided an opportunity for the researcher to gain experience and skills in the methodological aspects of interviewing, documentation and participant observation.

The Quairading Shire group was selected for the pilot study. It was formed for the specific purpose of seeking and obtaining vesting of a water reserve on the outskirts of the town for the local government authority. The group consisted of people from the township of Quairading, the local government authority, the local community landcare coordinator, local landholders involved in natural resource management, and members of the Quairading LCDC. Vesting of the town water reserve was sought and obtained for the local government authority, rather than the State government's Department of Conservation and Land Management (CALM) or the Nyoongar Land Council. The Quairading group was chosen for the pilot study because it had a documented history of the decision processes used, it was in close proximity to Perth, and involved multiple stakeholders. The group proved not to be not a suitable case study because, it was a single-issue group formed to address one issue, rather than being a longer-standing

subcatchment/natural resource management group.

In May 1998, eleven community people, and local and State government personnel were interviewed, and relevant documents describing the decision process were reviewed. The majority of interviews were taped and transcribed, with the exception being three telephone interviews. From the data collected, the case gave insight into the theoretical concepts of social sustainability. The pilot study highlighted the need to modify the interview questions, by rewording or omitting in full, questions which participants found difficult to answer due to their ambiguity, structure or relevance. Each question was devised to be more specific and gather information about the group, its decisions and decision-making processes. The results from this pilot study were not included in the study proper for the reason given above (see Table 2.4 for the case study selection rationale).

Selection of Regions for Study

Determining suitable regions for study was the first step in case study selection. Regions seemed a sensible place to start given that LCDs and subcatchments are nested within them, and the great interest being shown in regional delivery of natural resource management by government and communities alike (Jennings & Moore 2000). Four possible river basins and catchments focused on were the Avon, Blackwood, Kent and Wilson Inlet (Table 2.3).

The aim of the selection process was to choose two similar regions, based on river basins and catchments, in which to focus the case study research (see Table 2.3). Reason for this selection was to minimise the differences between the two case study locations. Keeping many variables constant allows for literal replication (Yin 1994).

Table 2.3 Selection Criteria for Regional Case Studies.

Region Attribute	Avon	Blackwood	Kent	Wilson Inlet
Regional structure	Yes three catchments (sub-regions)	Yes upper, middle & lower catchments	Yes upper & lower catchments	Yes multiple catchments
Environmental problems	Yes biodiversity loss, salinity, soil degradation	Yes biodiversity loss, salinity, soil degradation	Yes biodiversity loss, salinity, soil degradation	No waterway health
Proximity to Perth	Yes < 3 hours	Yes < 3 hours	No 4+ hours	No 4+ hours
Groups interested in participating	Yes	Yes	Yes	Yes
Active groups/ Sub-scales apparent	Yes LCDCs, Landcare groups	Yes LCDCs, Landcare groups	Yes LCDCs, Landcare groups	Yes LCDCs, Landcare groups
Group history available	Yes	Yes	Yes	Yes
Salinity management decisions	Yes	Yes	Yes	No primarily waterways
Multiple stakeholders involved	Yes Agriculture WA lead agency	Yes Agriculture WA Lead agency	Yes Agriculture WA lead agency	Yes WRC lead agency

The two regions chosen were those centering on the Blackwood and Avon, located in the Department of Agriculture's south-west region and the central agricultural administrative regions (Figure 2.2).

Figure 2.2 Location of the Avon and Blackwood Regions in the Central Agricultural and South-West Regions of Western Australia.

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Selection of these two regions was based on several factors. First, salinity management and the related biodiviersity loss associated with salinisation of land were key environmental problems in these two regions, creating a commonality that benefited case comparisons across them. Second, their close proximity to Perth (approximately three hours travelling time) and potential for access to established community groups with numerous stakeholder involvements provided attractive features for study. Lastly, the two regions provided cases embedded in a hierarchy including subcatchment and LCD groups within the regional scale. As shown in Table 2.3, the Blackwood and Avon regions satisfied a greater number of factors. The Wilson Inlet had several attributes that were unfavourable, such as a central focus on waterway health as opposed to salinity, a different lead agency and distant locality. The Kent region was unsuitable mainly due to the greater travel time (Table 2.3).

The selection of these two community-led regional groups, the Blackwood Basin Group and the Avon Working Group, led to the parallel selection of the two associated government-led regional groups, the South-West Regional Partnership Group and Central Agricultural Regional Partnership Group respectively. The geographic proximity and overlaps of these groups is apparent from Figure 2.3.

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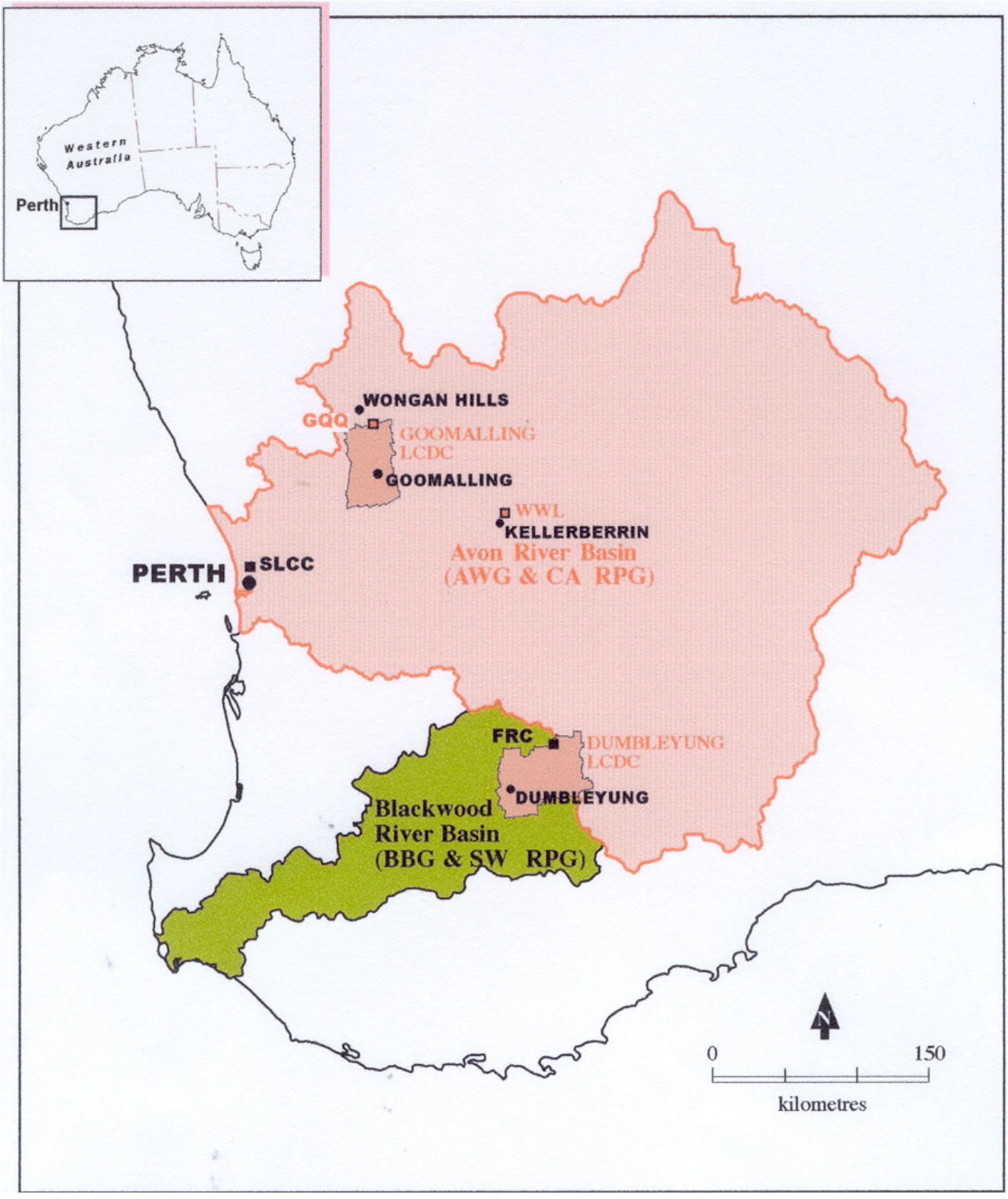

Figure **2.3** Location of the Case Study Groups in the **Two** Case Study Regions.

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Selection of Cases Within and Above Regions

Cases were selected from within the basin-centered regions based on a number of features. Those that appeared "representative" of decision-making by other natural resource management groups, while at the same time informing current understanding by being "revelatory", were favoured (Yin 1989). A combination of theoretical requirements and pragmatic considerations was used. Features included:

1) stable and active group (no reasonable risk of group dissolving, established for at least 2 years with a history of operation);
2) documentation for review (availability of background papers, plans, meeting minutes);
3) full completion in planned time frame (timing of group's activities coincided with data collection time frame);
4) clear decision envelope (decision-making process from problem identification to action taking);
5) involvement of key informants and participants (willingness to be involved); and
6) evidence of links to other scales of decision-making (vertical links to other decision-making scales through their decisions and implementation).

As part of the selection process key informants, including State government agency persons and community landcare coordinators, assisted in identifying suitable groups. The selection was biased in that only groups identified to be receptive to participating in the study were approached. The researcher's network of contacts and their associates was helpful in gaining access to and providing support for the research to be conducted, a tactic used by Carroll and Johnson (1990) to ensure cooperation. In each case study region, two to three LCDCs were considered with one LCDC being finally selected. Selection of suitable subcatchment groups was from a pool of eight to ten existing Focus Catchment

groups and other well established subcatchment groups. Two subcatchment groups were eventually selected from the Avon River Basin because an accelerated Landcare Vision[1] group (Gabby Quoi Quoi catchment group), who were also a Focus Catchment, were interested in participating. It was viewed their inclusion would provide additional insight given their past experience in a tripartite partnership with Alcoa of Australia[2] and Agriculture WA (see Moore et al. 2001). A further benefit was the group's location with the Goomalling LCD. Due to the Landcare Vision program being based only within the Avon River Basin, a single subcatchment groups was selected in the Blackwood River Basin from the available Focus Catchments groups.

Table 2.4 provides details on the selection of cases within regions. Additionally, the same criteria are applied to the regional and State-scale cases to illustrate their suitability as study foci. Figure 2.3 illustrates the location of the case study groups in the two regions.

Decisions Investigated

To help focus interviewee's thoughts and again empirical examples for analysis, members of each group were asked to jointly select a "decision" (see Table 2.4 for those selected) about which questions could be asked and documentation reviewed. The specific information obtained about each decision complemented often more general information about representation, leadership and partnerships obtained from case study investigations over the course of the study.

[1] In Western Australia Gabby Quoi Quoi along with five other subcatchments have formed an incorporated body, called Landcare Vision, to share their experiences and land management practices with others. The Landcare Vision Project exists in the Avon River Basin and involves these groups who have worked with Alcoa of Australia Limited and Agriculture WA to tackle land degradation. Through accelerated development these groups have become demonstration groups for other subcatchment groups to share their Landcare experiences through tours and farm visits (Landcare Vision 2003).

[2] Alcoa of Australia Limited, a bauxite alumina mining company operating in Western Australia, undertook with Agriculture WA (State government agency) accelerated Landcare planning and implementation, and established demonstration subcatchments.

Table 2.4 How Case Study Groups Satisfy the Selection Criteria.

Groups ® Selection Criteria ¯	**SLCC**	**SW RPG**	**CA RPG**	**BBG**	**AWG**	**Dumble-yung LCDC**	**Goom-alling LCDC**	**FRC**	**WWL**	**GQQ**
Stable and active group	Yes [being disbanded]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Documents available	Meeting minutes & policy material	Meeting minutes & planning material	Meeting minutes & planning material	Meeting minutes & group material	Meeting minutes & group material	Meeting minutes	Meeting minutes & media/ letters	Meeting minutes & group material	Meeting minutes, group & CSIRO material	Meeting minutes, group material
Decision in planned time frame	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clear decision envelope	Drainage review - policy	Strategic plan	Strategic plan	Strategic zone plan	Strategic plan	Drainage review & regulation	Tax rebate	Focus Catchment process	Nature cons. planning	Focus Catchment process
Participants willing to be involved	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes except one member
Vertical links to other spatial scales	Regional, LCD	State, regional	State, regional	State, LCD, subcatch.	State, LCD, subcatch.	Regional, subcatch.	Regional, Subcatch.	LCD	LCD	LCD

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Temporal and Spatial Boundaries of the Case Studies

To maintain consistency in reporting across all case studies, the cases were bound in the same time span by using concurrent replication. Concurrent replication (see Table 2.2) is distinguished from sequential direct replication in the choice of timing and sequence of the case studies. Concurrent replication meant all ten cases were investigated simultaneously, as opposed to conducting a series of sequential single case studies across time. A concurrent replication design, also referred to as systematic replication design (Yin 1981), maintains temporal consistency in contextual factors and conditions across all cases. By using a concurrent replication design rather than a sequential direct replication design, any external actions outside the study boundary (e.g., State and federal decisions or actions) impinge on all case studies.

Spatially, the boundaries identified by each case study group, provided the boundaries for this study. Thus, for the State Soil and Land Conservation Council, the case study area was the State. The case study regions for the community-led (Blackwood Basin Group, Avon Working Group) and government-led (South-West Regional Partnership Group, Central Agricultural Regional Partnership Group) regional groups, were defined on aggregations of natural resource units (subcatchments) and differentiated on an agroecological / administrative basis respectively. The LCDCs case studied were based on local government (shire) boundaries. For the subcatchment groups the case study areas covered an area comprising a number of farms, which were defined by a combination of hydrological and topographical features. The subcatchment is the basic unit that subdivides a region.

2.3 Research Method

The study followed a design that is consistent with other researchers' use of case study methodology (Crosthwaite et al. 1997; Eisenhardt 1991; Yin 1989). It closely parallels Eisenhardt's (1989) approach, in using an iterative process that links data to emerging theory. Unlike Yin's (1989) use of case studies to test a priori theory, a concerted effort was made to use the case studies to progress theory building. To enable such theoretical construction and comparison across cases there were multiple types of evidence collected for each case. The final part of the research design sought to develop and elaborate theory and compare these against findings in the literature.

Grounded Theory

Grounded theory is "a qualitative research method that uses a systematic set of procedures to develop an inductively derived theory about a phenomenon" (Strauss & Corbin 1990, p.24). This general method for developing theory is grounded in data gathered and analysed. Theory is generated through the constant interplay between analysis and data collection (Strauss & Corbin 1990). As new data was collected it was analysed against the existing (grounded) theory allowing for modification of theory, in essence building theory.

The research process involved coding of data into concepts based on the research problem and questions, and generating new concepts or categories from the emerging empirical data. From this point theory emerges and the ideas and concepts are interpreted into a whole framework. This approach seeks explanations for the "what is", "how is", "with what" and the "why" as a way of theorizing and searching for causal explanations, as opposed to other approaches that do not seek to provide connections and explanations (Strauss & Corbin 1994 ; Tesch 1990).

Grounded theory is an accepted tool in qualitative research and has been used in a number of community participatory studies (Tuler & Webler 1999; Moore 1996). The strength of inductively generating principles is the reduced likelihood of the researcher interpreting results in a way that supports predetermined views (Tuler & Webler 1999).

Inductive-Deductive Approach

The approach was a hybrid of empirical research and theory, where the researcher moved between the empirical and theoretical realms, with each being informed by the other. The inductive-deductive research methodology involved reflecting on the guiding theoretical notions as data collection and analysis occurred to determine if the data supported or refined current theory, or built "new" theory. This alternation of inductive and deductive also involved an iterative process of constant comparison of the qualitative data for theoretical refinement. This methodology values the understanding of data in context and the constant comparative[3] approach taken.

During data analysis the reassessment and refinement of theoretical concepts occurred in light of the new findings. These concepts drew heavily from the sustainable development literature, especially the three concepts central to this study of representation, leadership, partnerships. It was also possible through inductive-deductive theory elaboration to generate greater understanding of the relationships between these concepts.

2.4 Data Collection

Concurrent Data Collection and Analysis

The cases were studied concurrently with data collection over approximately a 24 month

[3] The constant comparative approach involves a process of progressive category clarification and definition (Glaser & Strauss 1967).

period (1998-2000). Data analysis was conducted concurrently to develop and identify concepts, and form multi-scale understanding of the concepts and issues. The use of Non-numerical Unstructured Data Indexing Searching and Theorising (NUD*IST) software assisted case study analysis through its storing, coding and retrieving capabilities, along with other uses such as full exploration of data patterns (Richards & Richards 2000; 1991).

Multiple Sources of Evidence

Collection of data from multiple sources of evidence has several advantages and was used for three reasons: 1) to provide converging lines of inquiry through data triangulation[4], 2) to allow a broader range of concepts and issues to be investigated; and 3) to strengthen case study findings and improve validity (Yin 1994). Sources of data were interviews, observation notes taken during group meetings and tours, and documentation. The data collection methods ranged from informal to more formal means of gathering qualitative information. Both contemporary and retrospective accounts comprised the data set. As outlined by Yin (1994, p. 80) and others (Frankfort-Nachmias & Nachmias 1996; Rubin & Rubin 1995; Creswell 1994; Jorgensen, 1989), the three different data collection methods were used with sensitivity regarding their relative strengths and weaknesses.

Interviews

Interviewing is a method of obtaining an account of events, behaviour or experiences taken from an informed person. They are rich sources of information and used extensively in case studies. Interviews can take numerous forms, including face-to-face and telephone interviews, and can follow a structured or unstructured interview format (Sarantakos 1993). The advantages and disadvantages of interviewing are outlined by Frankfort-

[4] Data triangulation is the rationale underlying the use of multiple sources of evidence (Yin 1994). It is one of four types of triangulation and deals with the convergence of data sources as opposed to the other forms that pertain to evaluators, theory and methods (Patton 1987).

Nachmias and Nachmias (1996).

Individuals were chosen for interview to represent the diversity within the groups. Selection covered the younger and older generation, gender, top and bottom subcatchment farmers[5] and people who were, or had been, associated with the group. When choosing participants for interviewing, I was aware that being a member of a group does not necessarily imply being representative of that group (Cook & Campbell 1979).

The concept of redundancy (Lincoln & Guba 1985) or theoretical saturation (Strauss 1987) was used to determine the number interviewed within each scale. According to this principle, "sampling is terminated when no new information is forthcoming from new sampled units" (Lincoln & Guba 1985, p. 202). In this study, saturation varied across the different groups. A total of 77 people participated in the study, 79% were community members and 21% were government agency representatives or support staff (Appendix 1.). A summary of the participant numbers interviewed at each of the four spatial scales is given in Table 2.5. The number of participants interviewed per group was variable and ranged from five at State scale to nine at subcatchment scale.

Table 2.5. Interview Numbers for each Spatial Scale

Scale	**Number of groups**	**Number of interviews**
State	1	5
Regional	4	31
LCD	2	13
Subcatchment	3	27

[5] Top and bottom subcatchment farmers are differentiated based on their geographical location within the subcatchment area. Top subcatchment farmers are sited higher and have a different hydrological and topographical landscape to that of farmers situated lower in the landscape.

Interviewees included landholders from farming enterprises, local community people, local government representatives, State government agency personnel (often regional managers, senior officers, Focus Catchment team members[6], Commissioner's nominee[7]), industry people, farming organisation representatives, conservationists, corporate business people, non-government organisation representatives and community landcare coordinators.

The selection of interviewees was aided by discussion with community landcare coordinators attached to LCDCs and subcatchment groups, chairpersons for each group, support personnel (executive officers, regional project managers), and by obtaining a comprehensive list of group members for each case study. It was also important to select individuals that had regular involvement in the group because regular participants would have the experiences to inform the study. The problem with using regular participants was those non-regular participants may have felt alienated or unrepresented by the general interests of the group. However, at no time during the course of my meeting attendances was there any evidence for this by those group members not interviewed. Efforts were taken to include those individuals who held different views, and this was assisted by using the local knowledge of the catchment coordinators, community landcare coordinators and executive officers.

The aim of the interviews was to capture the participants' perspective on the phenomenon of interest. An interview guide, composed of a list of questions, was used to ensure that all questions focused on the same phenomenon of interest (see Appendix 2). These interview questions were formulated around five requirements, which were: 1) specifying the kind of

[6] Focus Catchment team members are Agriculture WA officers with experience in farming systems, hydrology and vegetation. As a team of experts they aim to deliver high quality products and services tailored to addressing specific subcatchment issues related to land and water management in selected Focus Catchments across the State.

[7] The Commissioner's nominee is a Agriculture WA officer who is assigned by the Commissioner of Soil and Land Conservation as the Commissioner's representative and nominee under the *Soil and Land Conservation Act* 1945 (WA).

answers needed to meet the objectives of the question; 2) ensuring all respondents have a shared, common understanding of the meaning of the question; 3) ensuring that people when asked will know the answers and be able to respond; 4) ensuring respondents are able to answer the questions in the appropriate terms required by the posed question; and 5) asking questions respondents are willing and able to answer accurately (Fowler 1995).

A set of semi-structured questions was used throughout (Appendix 2), with some differences for community group and State government agency members. At the beginning of the data collection, an initial set of questions with associated probes were created and modified. After each stage of interviews, I re-examined and improved upon the questions without changing the subject areas being examined. During each interview, I made brief notes on new or interesting points that I later included as probes in subsequent interviews.

The interview questions were concerned with exploring participants' thoughts and experiences in relation to each group's decision-making processes. There were two parts to the interview, a section covering characteristics of the interviewee and the group, and a section covering a decision selected for study. In the first part the questions addressed why individuals had joined the group and the importance to them of participating; how they were involved currently and how they would be involved in the future; personal benefits and satisfaction with their involvement; and their perspective on the future viability of the group.

The second part probed their group's decision-making processes in relation to a process selected for study by the group. The interview questions explored: the problem and goals sought by the group; the group's decision-making processes and outcomes; factors influencing the group; problems experienced and how they were overcome; what was

gained from their decision processes and outcome; the function of partnerships and collaboration; and participants' thoughts on the nature of the decision process and outcome in terms of success and satisfaction. Other questions included in this section explored the vertical linkages of decisions between spatial scales and the meaning of sustainable agriculture (Appendix 2.).

No questions directly addressed the core concepts of this study – social sustainability, public participation, representation, leadership and partnerships. Rather, the latter three concepts, under the umbrella of public participation, emerged as central themes. All three emerged consistently as being central elements of "successful" decision-making. As such, analysis increasingly focused on them as central concepts, as described by this study's inductive-deductive approach.

Probes were used to get interviewees to elaborate and explain the reasons behind their answers, and to help focus the conversation on the selected decision process and outcome (Frankfort-Nachmias & Nachmias 1996). Use of open-ended questions in a semi-structured interview format required the use of probes as a tool for eliciting and encouraging further information without asking a large number of questions.

Open-ended questions were used as they do not force interviewees to adapt to preconceived answers, and this thus reduces the bias associated with a restriction in the range of possible responses. The use of open-ended questions was appropriate given: the objectives of the research (assists in answering a "how" research question); the interviewee's level of understanding about the process; and the ease with which the interviewees could communicate about the content of the process. In addition to the standard interview questions, I asked participants questions to help clarify points that

emerged from participant observation during group activities (workshops, meetings, forums etc).

The participants selected for interviewing were contacted by telephone. The majority of interviews were conducted at the participant's farm, or Landcare or government office. Interviews were conducted face-to-face and lasted from 45 minutes to 2.5 hours. Where possible, all interviews and informal discussions were audio-recorded, the exception being when noisy environments prevented successful recording, such as farms and group meetings. The taped interviews and informal discussions were transcribed, and these transcripts formed part of the database for the study. At the start of the interviews participants were informed of the format and purpose of the interview. Participants were also informed they could withdraw at any time without prejudice from the study.

Due to the distant location of a small number of participants, I interviewed them by telephone. After notifying the participant that the interview would be taped, interviews were audio-taped using a speaker phone set-up. With the exception of two group members, all members contacted to be interviewed successfully completed interviews. With these two, after three telephone calls to organise a suitable time and no response, the researcher did not instigate any further contact. To the researcher's knowledge only one member within the ten groups was opposed to being involved in the study, and that member was not approached for an interview.

The inquiry approach used in the interview (Senge et al. 1994) required reflection by participants, namely for them to examine their thinking processes. The benefit of such an approach was that participants become more aware of their own and the group's actions, often identifying key points that happened, and problems or benefits that the participants

had previously not realised. The self-reflection was beneficial for many participants, who gained a greater insight into the decision processes and functioning of their group.

Quotes are used in the results/discussion chapters to illustrate the points being made. These quotes help to communicate the true intent of participants without misinterpretation from the researcher, as well as reducing the risk of being taken out of context. To maximise the context and meaning of participants' responses, the general source of the quotes is given in angle brackets (e.g. [community member – regional]).

Participant Observation

Participant observation is described as a field strategy that combines a number of research methods including: document analysis, respondent and informant interviewing, direct participation and observation, and introspection (Denzin 1970). As a method of studying social processes, participant observation is appropriate for many studies (Jorgensen 1989). Participant observation allows researchers to describe "what goes on, who or what is involved, when and where things happen, how they occur, and why" (Jorgensen 1989, p. 12). In this study, the definition of participant observation is restricted to my observations of meetings and tours.

The small groups setting suited the technique of participant observation. By directly observing decision-making within the groups, I gained a better understanding of the environment within which decisions were being made. I had the opportunity to see things that may have escaped the conscious awareness of group members. In directly experiencing the processes I was able make the most of an inductive, discovery-oriented approach. Jorgensen (1989) and Yin (1994) tout participant observation for its ability to provide "insider" experience and "accurate" portrayal of phenomenon.

Observations of group decision-making over time were gained by regularly attending group meetings. An effort was made to attend as many group meetings as possible during the field work stage. A total of 52 group meetings were attended, with the number ranging from a minimum of three group meetings for each of the LCDCs (Dumbleyung and Goomalling) to ten group meetings for the community-led regional groups (Blackwood Basin Group and Avon Working Group). It was important during participant observation not to assume a position or role in the proceedings, especially in relation to highly controversial issues and intragroup conflict. Most groups requested verbal updates on the progress of the research. These updates were given to the groups, and consisted of a general summary of the research to date, and my reflections on the group's functioning. However, to avoid bias in the study results, no specific recommendations were made for corrective action to improve group functioning.

Personal reflections were part of participant observation. Reflections were derived from notes taken at group meetings, subcatchment tours, workshops and social events. These reflections often related empirical observations to theories other researchers had discussed in the literature. This allowed the marrying of concepts emerging from the data with general theoretical notions that had been previously examined. This blending of theory and practice was used to guide data collection.

Participant observation has several weaknesses. Important past events may have occurred of which the observer may not be aware. In addition, the presence of a researcher may change the social situation under study. The researcher risks identifying with the participants and may lose objectivity. To overcome these weaknesses participant observation was supplemented in this study by other research methods.

Documentation

Documentation formed part of the written evidence analysed. Documents collected for this research included: public documents (official agenda and meeting minutes, draft and final policy and strategy papers, media articles, letters) and private documents (internal documents related to the decisions being considered by the groups) (Creswell 1994). Regular contact was maintained with key members or staff associated with each case study group to receive on-going group material.

2.5 Data Analysis

Process of coding

The aim of the analysis was to comprehensively describe the decision-making processes and associated influences. Key words, phrases, and sentences in meetings, self-reflection notes and interview transcripts were given a specific code, allowing later retrieval and use to fully describe each code. When developing these descriptions, each coded item was compared with previous statements in the same code. The constant comparison of coded material generated comprehensive descriptions (Strauss 1987).

In this study the qualitative data were stored, coded and analysed using NUD*IST software. NUD*IST is designed specifically to analyse “rich, complex or messy data” (Richards & Richards 1998, p. 445). The computer software provides tools for visualisation, and display of ideas and analysis that are important in developing theory (Strauss & Corbin 1998). NUD*IST was particularly useful due to its ability to manage large numbers of transcripts. The software allowed structuring of the data into emerging concepts, followed by development and refinement of these concepts and the relationships

between them. Inevitable bias, however, was introduced through my subjective interpretation of data and the coding of text to specific concepts. To mitigate this bias the coded text under the key concepts was repeatedly examined and revised as my understanding developed.

Using NUD*IST, coding assigns passages of text in a document to a node. Nodes can then be linked to illustrate and later explain the relationships between codes. NUD*IST allows a hierarchical index or tree structured node system to be developed to keep track of the codes, identify similarities between them and provide an overall coding scheme for data analysis (Richards & Richards 1991).

In the analysis both pre-determined (also referred to as “starter” codes) and emergent coding was used. Key ideas and concepts that were expressed by group members prior to interviews formed the pre-determined codes. Emergent codes became evident through analysis as recurring regularities. As an example, this occurred when respondents raised issues regarding accountability and credibility in their interviews and group discussions numerous times.

As analysis proceeded some codes were removed as they were redundant, broad codes were more narrowly defined, overlapping codes were collapsed, and new codes added. Through this process of grounded theorising existing nodes were re-organised to create a revised index system. The final node index reflected both the data collected and the general mental constructs I had from my reading of the literature.

Beyond coding – interpretation and theory building

Analysis, both within and across cases, was based on explanation-building (Yin 1994).

Within each individual case, codes and their relationships to each other (evident through node indexes) were reviewed and refined to clarify and explain the three emerging concepts of representation, leadership and partnerships. The desired and existing attributes of these concepts at each spatial scale (within each case study) were crucial parts of this explanation-building. Emergent attributes were those frequently mentioned by respondents, either as an important feature of decision-making, or as a problem or deficiency. Here too, the literature contributed, via the inductive-deductive research mode described earlier, to fully describing these three key elements of public participation.

Having described the elements within a single case, the next step was to elaborate the explanation, hence the term explanation-building, through examining other cases at the same scale, and then cases at other spatial scales. The final product was a complex, theoretically and empirically rich explanation of representation, leadership and partnerships at a number of spatial scales.

Within-Case Analysis

Each case was analysed separately with attention to how respondents described experiences and meanings in the specific context of their decision-making. Mind maps, complemented by the node index, were particularly useful in organising the different concepts and ideas that emerged in each case and to help visualise the linkages and relationships between them. These maps essentially “encapsulate prior theory in ‘starter’ codes” (Richards & Richards 1991) and assist in further code generation. This was the first step in explanation-building.

Cross-Case Analysis

One of the great strengths of multi-case studies is being able to build a general explanation

that is supported by each of the individual cases, even thought the individual context of cases varies (Yin 1994). When looking for evidence in the data to support or verify explanations, I also looked for instance where statements were limited to one or a few cases. The following up of differences is part of grounded theory building (Strauss & Corbin 1990). At the regional scale, for example, group identity was expressed differently by members of the government-led groups and community-led groups. This difference was a result of their different mandates and roles. Identifying and fully exploring these differences between cases contributes to the richness of explanation-building.

Objective assessment of the performance of each scale using the cases studied and desirable attributes was based on respondents' determination of their performance based on their own expectations. The groups are judged on how they performed based on their own criteria of success. This provided a common measure of relative performance which could be used despite the recognised differences of each scale. Chapter 3 describes in detail the varying objectives, functions, issues, contexts and challenges of each case at the different spatial scales.

Determination of desirable attributes

Analysis included describing the current situation as well as what participants wanted. From the collected data (transcripts and participant observation) it was possible to identify features of representation, leadership and partnership for organising for social sustainability at the different scales. These desirable attributes are the expectations of performance at each scale, and they take into account the varying contexts across the five scales as perceived by the respondents/participants.

A detailed comparison of the study's findings with the literature on features of good public

participation was not the purpose of the research. While such an evaluation would provide the basis for identifying similarities and differences between the study's attributes and normative criteria presented in the scholarly literature and in other empirical studies, it was not part of the scope of this study.

The use of the term "attribute" refers to an individual aspect of a "desirable" form of representation and none of the elements are mutually exclusive. Carnes et al. (1998) chose to use the term "ideal" to describe individual aspects of "ideal" representation from the perspective of participants, none of which individually pertains to an "ideal". In this study "desirable" was favoured as the term "ideal" denotes a near-perfect state.

2.6 Validity and Reliability

The quality of research can be assessed by examining a study's constructs, and its internal and external validity (Cook & Campbell 1979). The criteria for research quality consist of: internal validity (credibility), external validity (transferability), construct validity (accuracy), reliability (dependability) and objectivity (confirmability) (Lincoln & Guba 1985). The criteria placed in brackets match the five conventional criteria used in this study to test the qualitative research conducted.

Case study research has been criticised on a number of fronts (Stake 1994; Miles 1979). Subjective interpretation by researchers may misrepresent study findings. There are no protocols to test subjective misunderstandings (Stake 1994; Miles 1979). This research was designed to address and minimize these threats by using a variety of case study tactics as outlined in Table 2.6. No observations or subsequent interpretations are perfectly repeatable, making it necessary to employ procedures (such as triangulation) to verify an interpretation (Stake 1994). As Janesick (1994, p. 217) states, however, "the value of the

case study is its uniqueness; consequently, reliability in the traditional sense of replicability is pointless here".

Table 2.6. Case Study Tactics for Tests of Research Design Quality.

Tests	**Case Study Tactic**	**Phase of Research**
Internal Validity	used analytic tactics of explanation-building; used of interview probes and supporting documentation;	data analysis data collection
External Validity	used replication logic in multiple-case studies;	research design
Construct Validity	used multiple sources of evidence for triangulating observations; established chain of evidence;	data collection data collection
Reliability and Objectivity	used case study protocol; developed case study data base.	data collection data analysis

Validity

The three types of validity include: *internal validity* for explanatory or causal studies to establish a causal relationship; *external validity* for establishing the domain to which a study's findings can be generalised; and *construct validity* for establishing correct operational measures for the concepts being studied. The main validity concerns in this study were internal and external validity, and to a lesser extent construct validity. Researchers conducting basic and applied research strongly focus on threats to internal validity (Cook & Campbell 1979).

Regarding internal validity it is important to minimise the occurrence of making an incorrect conclusion regarding a causal relationship, and to prevent a failure to recognise other contributing factors. The effects of different contextual factors on the decision-

making process and outcome weakened the internal validity. To minimise these effects, care was taken to select cases from similar settings and contexts. A summary of the organisational and decision-making environments in each case is presented in chapter 3.

It was necessary to use explanation-building as a tactic to gradually build an explanation of the phenomenon by iterative refinement of ideas based on the data. During this process rival explanations were put forth from analysing across other cases. This process was necessary to establish credible causal explanations and relationships, and to show that emerging ideas were internally consistent (Crosthwaite et al. 1997).

A threat to internal validity that Yin (1994) mentions is the use of inference by the researcher to infer a particular event resulted from or was caused by some earlier occurrence that was not directly observed by the researcher, but based on second hand information (interview and documentary evidence). Every effort was made to avoid making such inferences.

Internal validity was also likely to be affected by history, including events subsequent to the decision-making affecting respondents' perceptions of the process (Moore 1994). Inaccuracies in participants' recall arise from intrinsic human subjectivity, as well as faulty memory. A related problem is that people will often focus and reflect on different aspects of the same decision process or events. To deal with these issues it was necessary to allow interviewees to speak freely, but also to include probes on specific points that were important or other groups members had mentioned in previous interviews. Focusing discussion on key points, reviewing the documentation gathered, and cross-checking the data helped improve upon internal validity.

Retrieving memories becomes difficult when cues related to those past events were not present. This “mortality of memory” (Moore, 1994) occurs from erosion of respondents’ memories of events over the duration of the decision-making process. This problem of retrospective reporting of decisions, with short-term memory retaining little information about the decision, has been widely recognized (Moore 1994; Carroll & Johnson 1990). Retrospective reporting is open to fabrication and reconstruction. Recall problems were recognised as a potential problem with some decisions being examined. Background information from documentation enabled me to use interview probes as memory prompts for the participants. Gathering factual evidence can be problematic given there is a trade-off between the accuracy of reporting of events and the length of time in which a person experiences the event and reports something (Fowler 1995).

The hazards identified by Silverman (1993) with respect to fitting of data to ideal preconception of the phenomenon, and use of dramatic field data in place of more routine and indicative data was taken into account. Anecdotal data derived from brief conversations and the like, was cautiously used because of its weakness in representativeness (Bryman 1988).

External validity is the degree of confidence with which case study results can be generalised beyond the immediate study environment (Yin 1994). The cases selected for the study were not a set of “representative” cases. The intent was not to generalise to all other cases, but instead to generalise the findings to theory that can be applied in other natural resource management decision-making settings. Instead of relying on statistical generalisation, the case studies used analytic generalisation. The tactic used to strengthen the external validity of the generalisation(s) arising from the research was to use a multiple-case study design with literal and theoretical replication. The robustness of the

findings was increased through replication.

Construct validity concerns itself partly with methods failing to incorporate all the dimensions of the concepts (or constructs), leading to “construct underrepresentation”, or with methods containing aspects that are irrelevant to the concepts (or constructs) of interest in the study to produce “surplus construct irrelevancies” (Cook & Campbell 1979).

For construct validity, tactics include using explicit constructs and clear definitions, plus attention to convergence and divergence between concepts (Cook & Campbell 1979). Construct validity is improved by establishing an appropriate unit of analysis, and correct definitions and operational measures for any theoretical propositions (Crosthwaite et al. 1997; Yin 1989). In this study the elements of participation covered by representation, leadership and partnership, were used to determine whether the decision process and organising supported the concept of social sustainability. Social sustainability and the associated features of public participation have been reviewed in the literature as discussed in chapter 1.

Two other tactics were used to overcome any problems of construct validity. Firstly, several qualitative methods were used to gather data about group organising and decision-making, namely interviews, participant observation and documentation. Use of multiple data collection methods allowed for triangulation of observations. Convergence of multiple sources of evidence from several data sources within a single case study and convergence of multiple sources of evidence from the ten case studies was also used.

Another procedure used to enhance construct validity was developing a “chain of evidence” that linked between the research questions to the analysis of data, and the data to

the study findings. This allowed concepts to be clearly defined as part of the research questions and then followed through to the study findings.

Reliability and Objectivity

Reliability

Reliability demonstrates that the operations of a study, such as the data collection procedures, can be repeated with the same result (Babbie 1998). The reliability of the data and rigor of the findings depend on the ability of the researcher. A database was established as a means of instilling rigor and organisation into data collection and management (see Table 2.6). Reliability and rigor are difficult to evaluate, but are clearly enhanced by adherence to good research protocol. In this study, a protocol was used to systematically document and report on research procedures.

The advantages of having a single investigator doing data coding outweighed the disadvantages, in terms of being able to document the evolution of the code index. There were detailed descriptions for each code and a consistency in coding. The use of both a single observer and data analyser, however, creates concern regarding researcher subjectivity (Babbie 1998).

Objectivity

Case study research generally relies on researchers maintaining a neutral (unbiased) and objective perspective (Yin 1989). The threat to objectivity is the intrusion of the researcher's values (Babbie 1998). I often stayed on group members' farms during fieldwork and established relationships with individuals through numerous meetings and other group activities. It was important to maintain a researcher's perspective, but these opportunities allowed me to gain access to more information and greater insights through

informal discussions. By establishing trusting relationships with key informants I was granted access to information not available in the public domain.

"The ability to obtain sensitive insider information depends on the quality of the relationship between researcher and respondents" (Carroll & Johnson 1990, p. 43). As a researcher it was important to present a neutral image to the participants. I had no government affiliations, and was non-evaluative in my responses to any government agency, project, or program that was occurring. When conflict arose within groups, I maintained a neutral position. During interviews I refrained from passing comment when respondents spoke of conflict. Due to the emotive issues being studied, such as drainage, I had to remain neutral and not be perceived as supporting either sides of the conflict.

The close interaction with groups and individuals required a formal manner with participants during the observation phase of data collection to minimise any influence on the participants. It prevented me from offering assistance and ideas at times when the group or individuals might have benefited. To protect the validity of the research, it was not until after I had conducted the interviews that there were informal interactions and open discussions of the study findings.

Presentation of Results and Discussion

Data from the interviews provided the basis for most of the empirical findings presented in this dissertation, supplemented and supported by participant observation and documentation data. The literature was used to inform these empirical findings. Quotes are used to illustrate key points. In some instances I used several excerpts to illustrate the diversity of perceptions and meanings expressed by respondents.

The results and discussion appear in chapters 4 (representation), 5 (leadership) and 6 (partnerships). Chapter 7 summarises the findings of the study and concludes with the implications for managing natural resource management for social sustainability. The next chapter introduces and describes in detail the ten case studies, providing essential background for the subsequent results and associated discussion, and conclusions.

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CHAPTER 3.

CASE SUMMARIES

3.1 Introduction

This chapter provides details of the ten cases studied to give context to the study results. It provides an understanding of the group decision-making and organising environment. Ten groups in the study undertake natural resource management in two agricultural regions as recognised by the Western Australian Department of Agriculture, including the South-West and Central Agricultural (Agriculture WA 2000). The groups span four different spatial scales from State to subcatchment (Landcare) (Table 2.2).

For each group, their geographical location, formation, purpose, functions, partnerships, membership, representation, activities, meeting structure and decision-making procedure are described (Table 3.1). The final part of this chapter describes the decision and the associated preceding problem(s), selected from each case study group for detailed study.

A notable feature of the groups is the variety of different methods used to gain representation (Table 3.2). These methods included Ministerial appointment, LCDC nomination, and self-representation. The method used was related to the history of the group, purpose of the group, objectives being sought and the role of communities. I return again to representation in Chapter 4 to explore it in greater detail.

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Table 3.1. Details of Case Study Groups Selected in the Two Agricultural Regions and at Four Scales.

Group	Formation	Purpose	Function	Membership	Activities	Meeting Structure	Decision Process
State Scale							
Soil and Land Conservation Council	Statutory body formed in 1990 under State legislation	Peak State advisory & Landcare body	Advisory role to State Minister, policy-making, leadership, fulfil legislated functions	Geographical & sectorial community representation, State government NRM agencies *11 members*	▪ develop & review policy ▪ funding & education ▪ monitoring & reporting ▪ recommendations to Minister ▪ support regional NRM development	Formal meeting process with round table discussions, committees set up for agenda-based issues *Bimonthly meetings*	Discussion & voting, with use of consensus
Regional Scale							
South West Regional Partnership Group	State Ministerial initiative in 1996	Regional planning body for sustainable agriculture	Develop regional plan, advise Minister & direct Agriculture WA SRD program, link between Agriculture WA, farmers & industry	Community, industry, State government agency (Agriculture WA) *10 members*	• strategic planning, project management • rural community development • support local level innovation	Informal round table discussions with agenda *3-4 meetings per year*	Consensus seeking with minimum voting
Central Agricultural Regional Partnership Group	State Ministerial initiative in 1996	Regional planning body for sustainable agriculture	Develop regional plan, advise Minister & direct Agriculture WA SRD program, link between Agriculture WA, farmers & industry	Community, industry, State government agency (Agriculture WA) *5 members*	▪ strategic planning, project management ▪ rural community development ▪ support local level innovation	Informal round table discussions with agenda *3-4 meetings per year*	Consensus seeking with minimum voting
Blackwood Basin Group	Initiated by community in 1992	Peak regional NRM community decision-maker for coordinating & delivering NRM	Regional NRM planning & implementation	Geographical & sectorial representation by community, State government NRM agencies, industry *15 members*	▪ role in coordination of NRM including communications, education, delivering on-ground outcomes ▪ leadership role ▪ provide NRM services to community and govt organisations ▪ secure funding	Formal meeting process. Executive makes out of meeting decisions *Monthly meetings*	Voting
Avon Working Group	State government – community initiative in 1994	Peak regional NRM community decision-maker for coordinating & delivering NRM	Regional NRM planning & implementation	Geographical representation by community, State government NRM agencies, development commission, TAFE (no industry) *16 members*	▪ strategic planning, ▪ project management, ▪ advocacy ▪ facilitation ▪ information brokerage ▪ representation ▪ coordination ▪ secure funding	Semi-formal meeting process, round table discussions, sub-committees used *Approx 6 meetings per year*	Voting with some consensus
LCD Scale							
Dumbleyung LCDC	Gazetted under State legislation in 1987	Support soil and land conservation within Shire boundaries	Undertake land management & support Landcare groups	Subcatchment representation, local government, State government (Agriculture WA) *18 members*	▪ Landcare education ▪ funding ▪ subcatchment reporting ▪ clearing & drainage, ▪ reveg & preservation ▪ water use ▪ catchment & farm planning	Formal meeting process *Meets approx every 2-3 months.*	Motions & voting
Goomalling LCDC	Gazetted under State legislation in 1989	Support soil and land conservation within Shire boundaries	Undertake land management & support Landcare groups	Subcatchment representation, local government & State government (Agriculture WA) *13 members*	▪ subcatchment reporting ▪ pest eradication ▪ clearing ▪ feedback on NRM policy ▪ revegetation projects	Formal meeting process *Approx 10 meetings per year*	Motions & voting
Subcatchment Scale							
Gabby Quoi Quoi	Community initiative in 1989	Local NRM decision-making	Maximise productivity & sustainability by restoring degraded areas & reducing land degradation	Local landholders, Alcoa Australia representative *24 members*	▪ subcatchment planning ▪ field days ▪ funding applications ▪ demonstrations	Formal meeting process *Approx 3-4 meetings per year*	Motions & voting with some consensus
Wallatin Creek Wildlife & Landcare Inc.	Community initiative in 1984	Local NRM decision-making	Reduce land degradation problems & improve productivity to achieve economic & social benefits	Local landholders *19 members*	▪ subcatchment planning, ▪ nature conservation planning ▪ field days ▪ pest eradication ▪ funding applications	Formal meeting process, sub-committee makes decisions outside of meetings *Approx 3-4 meetings per year*	Motions & voting with some consensus
Fence Road Catchment	Community initiative in 1992	Local NRM decision-making	Promote sustainable agricultural practices & coordinate community Landcare activities	Local landholders *25 members*	▪ subcatchment planning ▪ community awareness field days ▪ pest eradication ▪ funding applications	Formal meeting process *Approx 3-4 meetings per year*	Motions & voting

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Table 3.2. Methods for Gaining/Appointing/Selecting Group Members.

Case Study Group	Method
Soil and Land Conservation Council 11 members plus government agency observers	Ministerial appointment of members to Council by the State Minister for Primary Industry & Fisheries. Limit of two persons actively engaged in agriculture, horticulture or pastoral activities. One person nominated on recommendation from the WA Municipal Association. One person nominated from a panel of names from the WA Farmers Federation, and one person from the Pastoralists and Graziers Association of WA. One person nominated by the Minister from a voluntary conservation organisation. One member of Agriculture WA and the Commissioner of Soil and Land Conservation. Three officers employed under the Public Service Commission Act. No explicit competency criteria given.
South-West Regional Partnership Group & Central Agricultural Regional Partnership Group 10 & 5 members respectively	Call for expressions of interest from individuals through the media. Ministerial appointment after individuals self-nominate. Members have agricultural, government and community backgrounds. Individuals are required to have experience, regional knowledge of community, and be industry leaders.
Blackwood Basin Group 15 members (8 community members plus 5 government agency representatives and 2 non-voting members)	LCDCs appoint single representative for each of the three sub-regions. Shires nominate one representatives for each of the three sub-regions. Others include: one WA Farmers Federation representative; one conservation representative nominated from a conservation group; government agency representatives from WRC, Agriculture WA, DEP, CALM and Ministry of Planning. Non-voting members from the Land Management Society and Bunnings Watercare Program. No competency criteria for members.

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Avon Working Group 16 members	Initially, representatives Ministerially appointed. Currently, three sub-regions each elect three community persons from LCDCs for 3 year term (nine community members), and seven members from government agencies and other community groups (Avon River Management Authority, TAFE, Development Commission). Community members are people with qualities of: strong community networks in their local area; good knowledge of local land management issues; and good communication skills to enable them to represent community ideas and issues.
Dumbleyung LCDC & Goomalling LCDC 18 & 13 members respectively	Each subcatchment nominates a representative. Any Shires which are in, or partly comprise, the land conservation district nominate a Councillor and/or Chief Executive Officer. Any special interest groups, and the Commissioner or his ex officio, or his nominee. Plus up to three persons from agricultural or pastoral activities (producer organisations).The Commissioner of Soil and Land Conservation appoints all persons. There are no competency criteria used.
Gabby Quoi Quoi Catchment 24 members	Any individuals leasing or owning land within the bounds of the subcatchment and representing their own interests. Members pay a nominal annual fee for membership. The membership is family based with individuals representing their families, often with one or more members from each family participating.
Wallatin Creek Wildlife & Landcare Inc. 19 members	Any individuals leasing or owning land within the bounds of the subcatchment and representing their own interests. Members pay a nominal annual fee for membership. The membership is family based with individuals representing their families.
Fence Road Catchment 25 members	Any individuals leasing or owning land within the bounds of the subcatchment and representing their own interests. Members pay a nominal annual fee for membership. The membership is family based with individuals representing their families, often with one or more members from each family participating.

3.2 Case Study Group Profiles

STATE SCALE

Soil and Land Conservation Council (SLCC)

Location

The Soil and Land Conservation Council has responsibility for sustainable land management extending across the State of Western Australia, an area of 2, 527, 633 km^2 (Figure 3.1). The State encompasses a diversity of landscapes from rangelands to cropping, and includes a variety of primary production sectors (dairy, horticulture). Agriculture is one of the State's major industries and economic growth sectors (Task Force for the Review of Natural Resource Management and Viability of Agriculture in Western Australia 1996).

Formation and Purpose

The Soil and Land Conservation Council is the peak State Landcare advisory body in Western Australia linking the rural community and the State government (Soil and Land Conservation Council 1997). The Council was established in May 1990, and is a statutory body under section 9 of the *Soil and Land Conservation Act* 1945 (WA). As outlined in legislation, the Council reports directly in an advisory role to the State Minister for Primary Industry & Fisheries. Even though the Council is a legislated body, it has no formal powers for enforcement. The Council can only bring about change through influencing key decision-makers, showing leadership and innovation, maintaining a credible and respected image, and drawing on members' formal and informal networks.

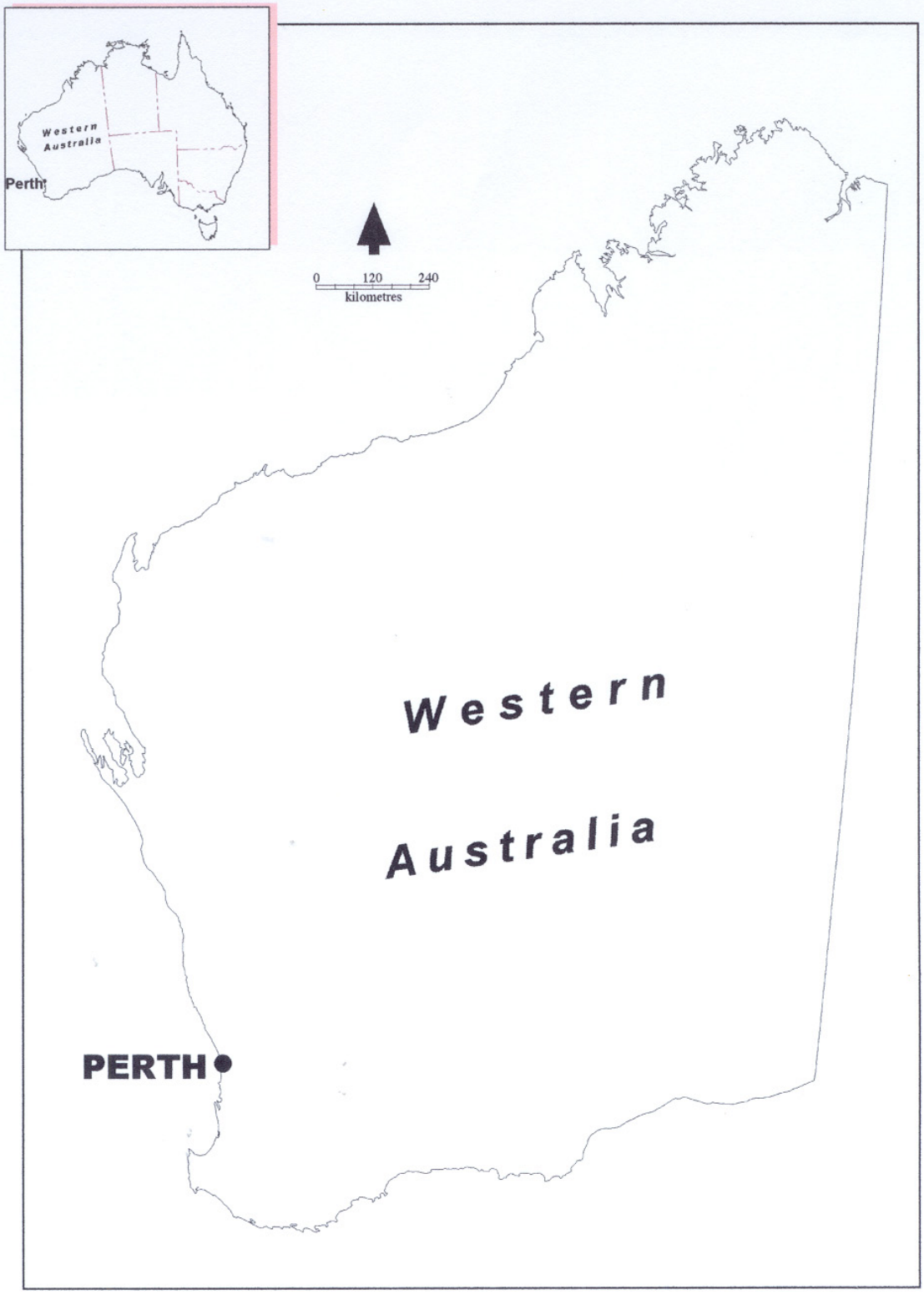

Figure 3.1 Location of Western Australia.

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The Council's mission is "to provide policy and advice to government on the conservation, sustainability and improvement of soil and land resources" (Soil and Land Conservation Council 1998, p. 4). The primary objective of the Council is "to provide direction for Landcare to maintain and improve the condition of land" (Soil and Land Conservation Council 1998, p. 4). Two secondary objectives are: improved management of land; and reducing inappropriate use of land resources. These objectives are related through strategies that identify inappropriate use of soil and land resources; develop appropriate policy; support policy implementation through funding and education; ensure adequate monitoring and reporting; and support management practices through funding and education.

From 1998 the Council has been waiting for new legislation (the Agricultural Management Bill) to be passed through parliament. The formulation of this new agricultural management legislation will abolish the Council and replace it with a Sustainable Agriculture Board (Soil and Land Conservation Council 1998)**.** Recent restructuring of Agriculture WA will align this new board more closely with the agency and the Sustainable Rural Development Program.

Functions and Partnerships

The functions of Council as listed in section 16 of the *Soil and Land Conservation Act* 1945 (WA) include: policy development on soil and land conservation issues; leadership for Landcare in Western Australia; monitoring land degradation; and assisting the Commissioner for Soil and Land Conservation. The members bring a wealth of information to the group, operating across numerous spatial scales from local to national level. The Council was designed to be an apolitical body, providing a balanced view from community and government agency in an advisory manner.

The group has a formal partnership[1] with Agriculture WA, which is based on a statutory requirement for administrative support and funds for the group's functioning. Other partnerships are informal or based on Memoranda of Understanding (e.g. clearing of remnant vegetation) (Refer to chapter 6, 6.3 for detailed description of the range of partnership arrangements).

Membership and Representation

Membership of the Council is based on sectorial community representation, along with local and State government agency (Table 3.2). The three officers employed under the Public Service Commission Act includes the Executive Director of the Sustainable Rural Development Program of Agriculture WA, a Water and Rivers Commission (WRC) representative and an Executive Officer. The Executive Officer provides administrative and meeting support for the group to function. This person is an Agriculture WA government employee appointed by the agency. Officers from the Department of Conservation and Land Management (CALM) and Department of Environmental Protection (DEP) attend as observers.

The 11 members on the Council consist of community and government representatives. The Minister for Primary Industry & Fisheries appoints members for a three year term. To be appointed community members must nominate themselves. There is no mechanism in place to remove members who fail to adequately represent and commit to the Council.

[1] Formal partnerships have formalised collaboration using written agreements between partners. Agreements outline each partner's financial contribution, responsibilities, roles and areas of interest. Informal partnerships have no written "contracts" or agreements binding the partners. This collaboration occurs in the form of joint panning activities, policy development initiatives and shared on-ground activities.

The Soil and Land Conservation Council consists of recognised leaders from their respective organisations and communities, adding credibility to the Council's status. The current composition of members allows Council to have cross-membership with national organisations (Australian Landcare Council), State organisations (State Salinity Council, Sustainable Rural Development Steering Committee), regional natural resource management groups, local government, and LCDCs. The composition of the membership has been relatively stable since it inception, allowing the Council to draw on these long-standing members for organisational knowledge.

Activities

Over the past years Council activity on policy review and development has strengthened, with identification of policy issues to be dealt with by the Council now a major priority. Activities undertaken by the Council include: review of the *Soil and Land Conservation Act* 1945 (WA); review of the Salinity Action Plan; development of models and structures to support integrated natural resource management in Western Australia; supporting Landcare through sponsorship and financial support; formalising LCDC policy; involvement either in developing or producing national audit and funding guidelines, and State of the Environment Reporting (Soil and Land Conservation Council 1998).

The Council has supported the development of a regional framework and partnership agreements between government, industry and the community. They have identified supporting regional groups as an important part of helping Landcare groups and State natural resource management agencies to work in partnership to develop strategies that address major land conservation issues.

The Council provides advice to the Minister on the condition of soil and land resources through its monitoring, and reports on soil and land conservation programs and activities. Council shows leadership through its education and awareness raising of land degradation and conservation issues, and involvement in the State's coordination of the federal government's funding programs.

The State Salinity Council formed in 1997 to lead and support the community in addressing salinity in Western Australia. The Council was comprised of representatives from community stakeholder groups and government, providing a link between community groups, State government agencies and the Government of Western Australia (State Salinity Council 2001a). The Council functioned to: provide leadership, provide strategic advice to the Western Australian State Cabinet on the Environment, coordinate decision-making and actions between the stakeholder groups, and monitor and evaluate the success of the State Salinity Strategy (State Salinity Council 2001a). During the Council's formation between 1997-2002 it allowed State government agencies, production-focused groups, conservation groups, local government, Indigenous interests and regional natural resource management groups to meet jointly to progress common issues.

The new Council for Natural Resource Management formed in 2002 on the recommendation of the Salinity Taskforce, which was established by the State Government in 2001. The Natural Resource Management Council replaces the State Salinity Council, and has evolved to cover a broader range of environmental issues that need to be addressed in Western Australia (State Salinity Council 2001b). The new Council incorporates people from a variety of backgrounds possessing knowledge of different natural resource management issues. These members have demonstrated

competencies in strategic thinking and decision-making, leadership and relevant industry or sector networks, and effective communication skills (State Salinity Council 2001b). Individuals are appointed to the Council by the State Minister for the Environment and Heritage (formerly called the State Minister for Primary Industries & Fisheries). They provide strategic advice to the State Government, through the Cabinet Standing Committee on Environmental Policy, which is comprised of several State Government Ministers, on salinity and natural resource management. While the Council functions as an independent body from State Government, the new Department of Environment, Water and Catchment Protection provides professional, administrative and technical support.

Meeting Structure and Decision-Making Procedure

The Council meets bimonthly and for a full day. The Council conducts its meetings in Perth, but may on a yearly basis tour rural areas. Council meetings involve a formal process with round table discussions. Meetings are structured whereby members discuss issues and listen to presentations. Consensus is attained to carry motions. The Chairperson, nominated by the Minister, directs meetings and has control of the proceedings. The Council's Executive Officer, in consultation with the Chairperson, prepares an agenda and provides accompanying information documents to members prior to the meeting date. Meetings consist of members' reports, Commissioner of Soil and Land Conservation's report, updates on on-going projects and administration of schemes, and presentations from other organisations or individuals. Council meetings are closed to the public, except for invited guests and persons required to provide expert advice to the Council.

Working groups are created as needed and work on an *ad hoc* basis, drawing on the Council's expertise and knowledge. The purpose of working groups is to pursue and progress Council issues outside of the formal meetings. Members come from a wide variety of State government agency, community and external organisations, and report back to Council. Previous working parties have been formed to progress policies on rangecare, remnant vegetation clearing, and drainage.

Two related decision-making procedures are used by the Council - consensus and if necessary voting. The decision-making processes normally involved in-depth discussion of the issue, followed by attainment of consensual agreement on the course of action that would be taken. Each issue was assessed to determine, firstly, if the issue fell within the scope of Council's strategic objectives; secondly, if the Council was the best appropriate organisation to deal with the issue; and finally, if collaboration with other individuals or organisations was necessary. The next step of the process was identification of goals/outcomes and the resources required (Soil and Land Conservation Council 1997). A member then puts forward a motion and formal acceptance via voting was then sought. In certain instances, members who represented specific organisations may indicate their "party line" on that issue. If the Council intended to act contrary to what that organisation supports, dissent was recorded in the meeting minutes. Decision-making by consensus appeared to satisfy all the members, at the same time ensuring all views were addressed.

REGIONAL SCALE

South-West Regional Partnership Group (SW RPG)

Location

As defined by Agriculture WA, the South-West agricultural region of Western Australia covers an area of about 51,680 km^2 (Figure 1.2). In Western Australia for planning purposes, Agriculture WA has divided the state into six "regions" referred to as Sustainable Rural Development regions. These regions are: Kimberley, Southern Rangelands, Northern Agricultural, South-West, Central Agricultural and South Coast (Agriculture WA 2002). The region extends from Bindoon in the north, down along the coastal plain to Walpole, and inland to the eastern edge of the Blackwood River Basin (Figure 3.2). Encompassed within this area is the Blackwood River Basin managed by the Blackwood Basin Group (22,000 km^2).

Formation and Purpose

The South-West Regional Partnership Group was formed in 1996 by the Minister for Primary Industry & Fisheries for the Sustainable Rural Development regional program. The group's mission was a commitment to "working with rural communities to build a strong agriculture, that maintains a healthy environment and to rural economic and social well-being" (Agriculture WA 1998, p. 5). The South-West Regional Partnership group was an example of regionalisation.

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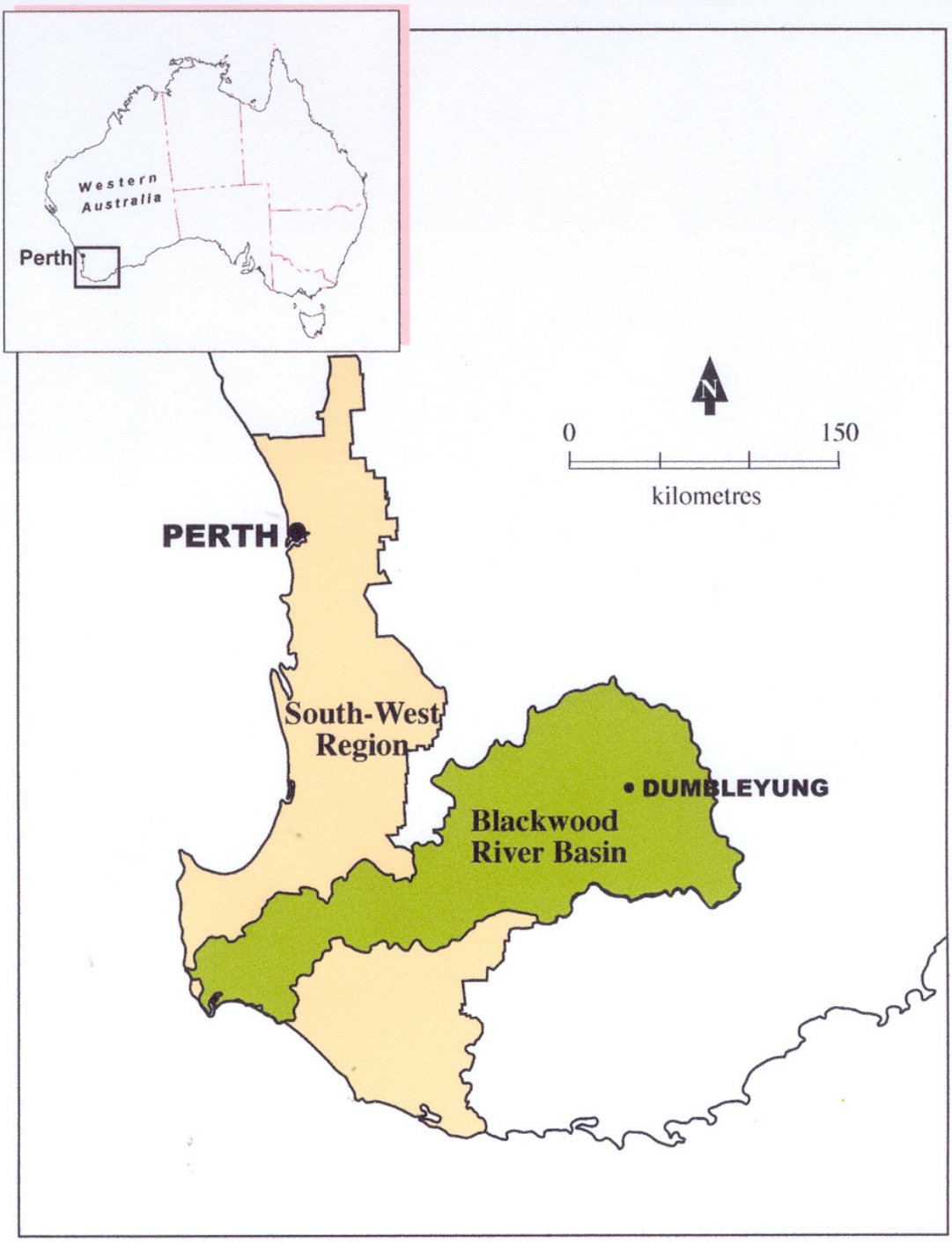

Figure 3.2 Location of the South-West Region in Western Australia.

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The group's purpose was to direct the activities of Agriculture WA's Sustainable Rural Development Program in the South-West region, and to advise the State Minister on how Government as a whole could ensure the long term sustainability of agriculture in the South-West region. The group's regional strategic plan *Successful Rural Futures* (South-West Regional Partnership Group 1999) identified the key global and national trends influencing Sustainable Rural Development in the region. Constructed from these trends, the group has charted a preferred "Smart Agriculture" scenario for the next 20 years in the region (South-West Regional Partnership Group 1999). The objectives targeted by the South-West Regional Partnership Group's projects included farm businesses profitable in the long term, support for a healthy environment, management of impacts to ensure the natural resource base continues to be productive, and ensure that rural communities would thrive.

Functions and Partnerships

A key function of the South-West Regional Partnership Group was to develop a regional plan to reflect the Sustainable Rural Development's Program priorities for the region, by undertaking strategic planning activities involving input from regional partnership group members, Sustainable Rural Development project staff, and local communities. Other associated functions are given in Table 3.1. The group has implemented several projects to attain a number of "critical success factors" identified for achieving the "Smart Agriculture" scenario. Implementation has been achieved by initiating strategic partnerships and developing skills in the community and the government agency to deliver sustainable rural development. The group now has partnerships with Agriculture WA, communities in the South-West, and State industry groups. These partnerships are informal, and based on shared programs and information.

Membership and Representation

This government-led regional group has a membership of ten Ministerially appointed members. It is comprised of farmers, agricultural consultants, and local government and Agriculture WA staff. No formal membership selection criteria are used in the appointment process. Members cover horticulture, dairy-beef, tree farming, broad acre farming, agricultural consultants, local government, LCDCs, and Agriculture WA. State government membership is limited to the Agriculture WA program manager and executive officer, with no other government agency membership. Members represent community sectors (e.g. dairy), rather than particular groups. They come from a wide variety of backgrounds (banking; agricultural and financial consultancy; marketing; and urban planning) and geographical areas. Attributes of the members included having formal and informal networks, presence on several natural resource management organisations at different scales, and an array of professional skills and local knowledge (South-West Regional Partnership Group 1999). A change of membership has maintained the group's momentum and future focus.

The advantage of this type of membership was that it did not require members to consult constituencies to determine if they supported a position, slowing the decision-making process. This feature describes a reference group, in contrast to a representative group such as the Soil and Land Conservation Council, the community-led regional groups (i.e. the Blackwood Basin and Avon Working Groups), and LCDCs.

Activities

The South-West Regional Partnership Group undertook strategic planning to devise short and long term plans, with yearly budget allocations decided by the Sustainable

Rural Development Steering Committee. Activities managed by the group consisted of regional and geographic based projects. They developed and were committed to implementing a Strategic Plan, *Successful Rural Futures* (South-West Regional Partnership Group 1999), setting out their activities for the next three years. The Plan charts a strategic direction for Agriculture WA's Sustainable Rural Development program, and identifies key regional issues, opportunities and trends. Rural community development and local level innovation were supported through the group's planning process and project management. The South-West Regional Partnership Group provided a vital communication link between Agriculture WA, farmers and industry.

Meeting Structure and Decision-Making Procedure

The group met every month during the formation of the region's strategic plan. The group now meets 3-4 times per year, coinciding with project review and funding bids. Meetings were based either at regional centres or in Perth, depending on agenda issues and the presence of visitors. Meetings were structured around agenda items, and involved presentations to invited stakeholders (e.g. local government representatives, regional group representatives, Ministerial officials, policy officers) by the Executive Officer or group members. The function of these information exchanges was to build a better understanding of the group's projects, and to identify synergies with other agents for mutual benefits. Other than these sessions, the meetings were closed to the public. Project Managers of the Sustainable Rural Development projects did not attend unless requested to do so in order to provide project updates.

Decisions made by the group were aligned with the regional strategic plan, with consideration given to other parallel processes and activities being undertaken by other regional groups and State organisations. Decisions were frequently reached through

consensus. Agreement was sought after round table discussion and presentation by Project Managers, Program Manager, Executive Officer or invited guests. Occasionally, when necessary, voting was used by the group for major decisions.

To influence State level funding, decision-making by the regional group needed to link with, and parallel the State level Sustainable Rural Development Steering Committee planning process. A planning cycle was developed, and group meetings were scheduled around this cycle to complement State scale decision-making.

Central Agricultural Regional Partnership Group (CA RPG)

Location

The Central Agricultural Region extends over three large catchments, including the Avon, Lockhart and Yilgarn, covering an area of approximately 120,000 km^2 (Figure 3.3).

The region includes 33 Shires across the central and eastern wheatbelt, extending from Dalwallinu in the north, out to Southern Cross in the east, down to Pingrup in the south and west to Northam. The region shares similar geographical and administrative boundaries as the Avon Working Group (Figure 2.1, estimated 120,000 km^2) and encompasses the Swan Catchment.

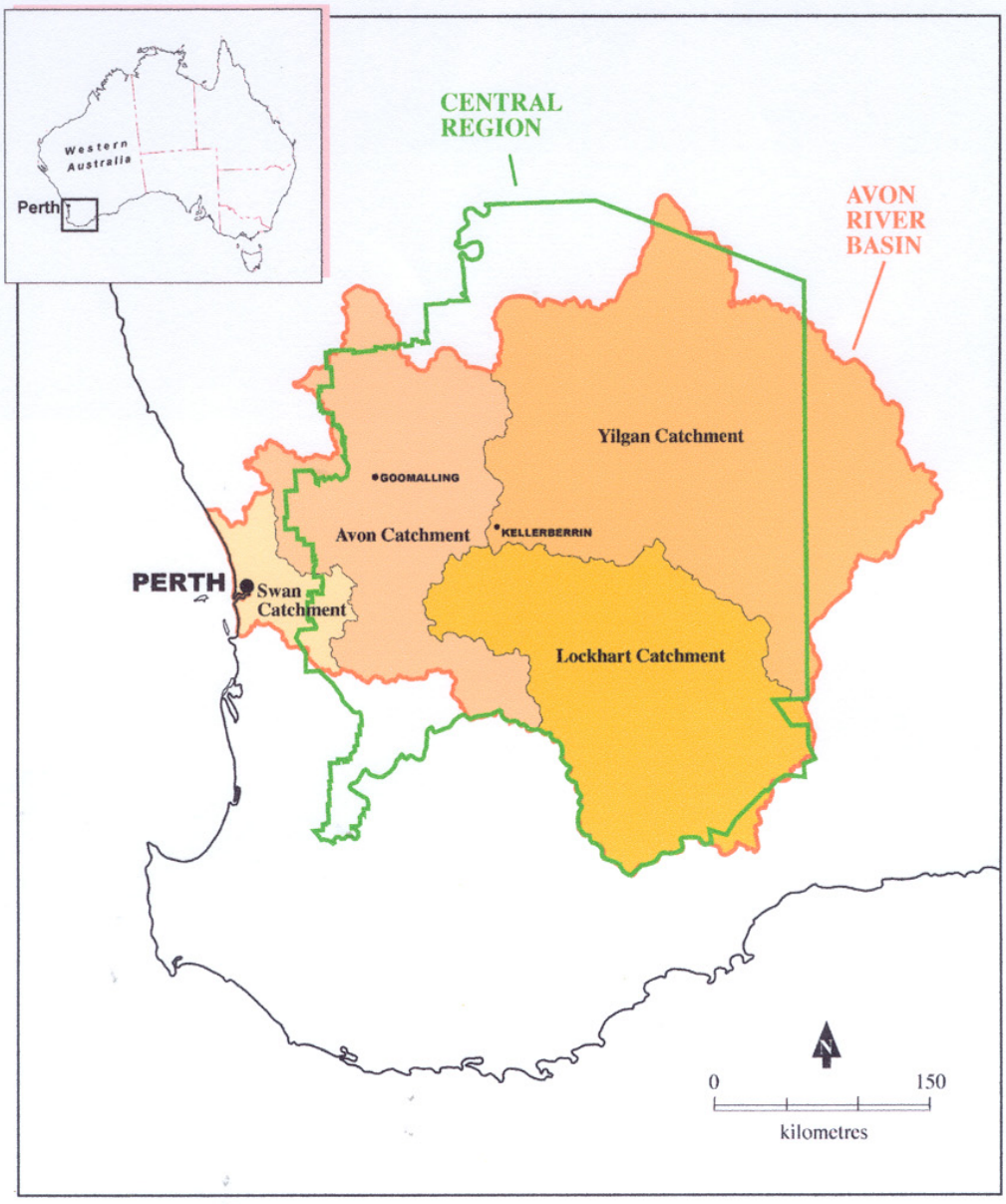

Figure 3.3 Location of the Central Agricultural Region Covering the Three Catchments – Avon, Lockhart, Yilgarn.

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Formation and Purpose

The Central Agricultural Regional Partnership Group was established at the same time as the South-West Regional Partnership Group by Agriculture WA, and is a "sister group" to them and the other four regional groups across the State. The group is the region's planning body for sustainable agriculture, functioning in a strategic decision-making role. The mission of the group's Sustainable Rural Development program is similar to its "sister group", which is "to work with rural communities to build a strong agricultural system, that maintains a healthy environment, and contributes to rural economic and social well-being" (Central Agricultural Regional Partnership Group 1998, p. 1).

The Partnership Group's vision for agriculture in the region was "not of what agriculture will end up … the Partnership Group has a vision of rapid and radical change, a process of movement toward a future we don't yet know" (Central Agricultural Regional Partnership Group 1998, p. 4). The Program aimed for faster and deeper innovation in farming systems by supporting local level innovation (Central Agricultural Regional Partnership Group 1998). The objectives pursued by the group included: regional planning and partnerships for sustainable natural resource management and economic development; sustainable farming systems; local communities taking coordinated action for catchment management; improved accessibility of information; improved managerial skills; communities taking action for their economic and social development; and monitoring and evaluation of the impacts of rural land use (Central Agricultural Regional Partnership Group 1998). Each objective has underlying strategies setting our how they will be achieved. The charter of the group was to set the agenda for the program, and to oversee its implementation. There were no group goals, only Sustainable Rural Development Program goals directed by the State

steering committee. Broad group goals were encapsulated within the Group's strategic plan (*Strategic Plan (Draft),* Central Agricultural Regional Partnership Group 1998).

Functions and Partnerships

To deal with strategic issues related to the region, the group undertook multiple functions, including: the development and implementation of a regional strategic plan; provision of advice to the Minister for Primary Industry & Fisheries; direction of Agriculture WA's Sustainable Rural Development Program in the region; and provision of a link between Agriculture WA, farmers and industry.

The group oversees a range of projects implemented through the Sustainable Rural Development Program to deal with challenges facing the region. The emphasis is on innovation on the ground in the form of sustainable farming systems, local communities taking coordinated action for catchment management, improved accessibility of information, and improved managerial skills (Central Agricultural Regional Partnership Group 1998). The group's planning covered land management practice, farm business management, and rural community development.

The Central Agricultural Region Partnership Group is different from the South-West Regional Partnership Group in that their projects are directed to deal with issues in a region with a less diverse array of agricultural activities (e.g. predominantly cropping and grazing). Subsequently, their program structure and associated projects are oriented to dealing with associated problems such as salinity. Some projects are, however, similar between the regions because they deliver generic programs of Agriculture WA, such as the Focus Catchment process. The Focus Catchment process develops (sub)catchment plans to ensure sustainable use of natural resources, and to manage

degradation. It is an Agricultural WA program financed under the State Salinity Strategy to help local communities work collectively for the common good of managing salinity with the best technical assistance available (Agriculture WA 2000).

The group has informal partnerships with Agriculture WA and the communities of the Central Agricultural Region, specifically those within the Avon River Basin. These partnerships provide linkages with communities and State government. The group does not have explicit partnership arrangements with agricultural industry groups in the region.

Membership and Representation

This government-led regional group has drawn members from the farming community, rural consultants, local government, LCDC, tertiary education institution (TAFE), and State government. The group has five members. Membership has been problematic, with six community members resigning for a variety of reasons (time limitations, differing expectations, moving from the region). The group has continued to function with its remaining few original community members, supplemented with an additional community member. Members were Ministerially appointed. Informal criteria gave preference to members who were young, not active on too many committees, and had been involved in the Progress Rural Program conducted by Agriculture WA.

Activities

Activities have included strategic planning, project management, and progressing rural community development. The most important activity for the group was developing the region's Sustainable Rural Development strategic plan (Central Agricultural Regional Partnership Group 1998). This plan provides a "blueprint" for new directions for the

region, supports local level action and guides stakeholders (landholders, government, local catchment groups and regional planning groups) to set their goals in light of this plan. Members are also involved in project review and budget bids on an annual basis, with briefings from the region's Sustainable Rural Development Project Managers and the Group's Program Manager.

Meeting Structure and Decision-Making Procedure

The group met quarterly. Meetings were occasionally located around the region, and covered a whole day. The Executive Officer in conjunction with the Program Manager and Chairperson set the meeting agenda. Meetings were often attended by project and policy officers of Agriculture WA to give progress updates, and other persons attended to provide information to the group on current decision-making issues. Formalities included standard meeting procedures, and the presentation and acceptance of past meeting minutes.

The group operated through informal round table discussions, with all members actively participating and providing information. Decision-making was generally by consensus with minimum vote taking occurring. Discussions by members prior to making decisions involved members putting forth their concerns and ideas, and informing discussions from their experiences and knowledge. Conflict was minimal within the group as members were given equal opportunity to speak, as well as respecting each other. When necessary, due to the timing and urgency of issues, certain decisions were sometimes made by the Program Manager outside of group meetings and reported back to the group at the next meeting. Such decisions were often made in consultation with the Chairperson.

Blackwood Basin Group (BBG)

Location

The Blackwood Basin encompasses 22,000 km^2 and has a population of 40,000 people. The Blackwood Basin extends from Kukerin in the eastern wheatbelt to the river mouth in Augusta (Figure 3.4). The Blackwood Basin Group's geographical relationship to the South-West Regional Partnership Group is shown in Figure 3.2. The latter comprises a portion of the South-West Region, and encompasses the hydrological boundaries of the Blackwood River. Predominant land uses include sheep and grain production, horticulture and forestry, with some mining and tourism industries.

Formation and Purpose

The Blackwood Basin Group's formation was assisted through funds from the State government enabling the group to implement integrated catchment management (Dodson pers comm. 1998). Community concerns regarding the decline in the Blackwood Basin's natural resources by the Shire of Bridgetown-Greenbushes and local organisations instigated the group's formation. Forming in 1992, the Blackwood Basin Group (formerly the Blackwood Catchment Coordinating Group) began operating as the peak body for existing land conservation groups and the LCDCs. While the group was formed from a State Ministerial initiative, it is representative of regionalism. The Blackwood Basin Group has no statutory powers, maintains a voluntary community basis, and is independent from State government.

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Figure 3.4 Location of the Blackwood Basin Group.

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The Blackwood Basin Group is regarded as the peak natural resource management community decision-maker in the region, delivering assistance for sustainable land management through devolved government funds and awareness-raising activities. The group deals with major land and water resources challenges within the catchment, including dryland salinity, degradation of potable water supplies and loss of biodiversity. It now represents 17 LCDCs, 150 subcatchment groups, 19 local government authorities, and a number of active conservation and special interest groups (Blackwood Basin Group 2000). The Group's Mission is to inspire the sustainable management of the Blackwood catchment's resources for present and future generations through actions of coordination and education (Blackwood Basin Group 2000). The group's core business is facilitating long term natural resource management by providing assistance through a framework and expertise that improves ecological, social and economic values (Blackwood Basin Group 2000)

Functions and Partnerships

In partnership (both formal and informal) with the State and federal governments, the Blackwood Basin Group has progressed natural resource management across the Basin and beyond. As a community-led regional group, it has set the strategic direction for the coordination of natural resource management, supported community leadership and developed a strong regional identification within the Blackwood Basin. Functions such as fund management, development of community goals and targets, and education have been part of the group's brokering between government and the communities (Ecker & Chadwick 2000). The group has progressed sustainable agriculture by addressing economic and environmental sustainability and through contributing to political decision-making (Blackwood Basin Group 2002a).

The group has produced the Blackwood Basin Group Business Plan (Blackwood Basin Group 2000), and undertaken partnership analyses with their partner agencies. Partnership agreements have been developed and finalised with Agriculture WA and a Memorandum of Understanding produced. Partnership agreements between regional organisations and State government agencies have been implemented to improve funding accountability and formalise commitments (Blackwood Basin Group 2000). Partnerships with State government agencies have been the most important collaborative ventures undertaken by the group, including securing financial resources and partners' voting rights.

Membership and Representation

The Blackwood Basin Group has a broad community membership drawn from across the catchment area and State government agencies (Table 3.2). The15 member group included representatives from geographical areas across the catchment, along with sectoral representation from industry, farmer and conservation groups, representatives from State government agencies, the Land Management Society, and Bunnings Waterwatch Program. Community members are nominated by local government authorities, LCDCs, farmer organisations, industry and the community. Membership is for a three-year term.

The Blackwood Basin Group operates in close association with the South-West Catchments Council, and South-West Regional Partnership Group. The Blackwood as the largest sub-region of the South-West Region means the Blackwood Basin Group works closely with the South-West Catchments Council. The South-West Catchments Council provides a forum to support links between on-ground action and planning and decision-making. The council consists of representatives from the main regional natural

resource management groups with the South-West region. The planning strategies and diversity of the Blackwood Basin are recognised and supported by the South-West Catchments Council (Blackwood Basin Group 2000). The Chairperson and the Group's employed Program Coordinator represent the Blackwood Basin Group at numerous other meetings. The Program Manager is employed by the Blackwood Basin Group, and is a non-government person charged with the role of managing and overseeing the group's activities. Other support staff include: Executive Officer; Communications, Monitoring, Evaluation and Implementation Officers; and Biodiversity Extension and Spatial Information Officers.

The working relationship between the Blackwood Basin Group and the South-West Regional Partnership Group is one of limited direct interaction, with the Chairpersons, Executive Officer and Program Manager meeting as needed. The South-West Regional Partnership Group provides financial resources to the Blackwood Basin Group for implementation of catchment management in the Blackwood and Agriculture WA programs. The Blackwood catchment is a large part of the South-West Regional Partnership group's area of interest.

Activities

In the past, the group's activities have been predominantly operational/management - level focused. In 1998 the group produced their first regional initiative, *BBG Securing the Future Regional Initiative* (Blackwood Basin Group 1998). More recently the group has adopted a more strategic approach to better source Commonwealth funding. The group's attention has been on improving communication and coordination of activities across the Basin. The group's current regional initiative, *Blackwood Basin Securing the Future (1999 - 2002)* (Blackwood Basin Group 1999), translates federal and State

policies to on-ground activities. As a means of implementing sustainable natural resource management, zone action planning has been developed and adopted (Ecker & Chadwick 2000). Within this initiative, “zones” provide the planning unit for practical land management and a locally-based mechanism to accelerate on-ground activity (Ecker & Chadwick 2000).

Activities of the Group have also been directed towards encouraging land users and the community to adopt sustainable management practices to deal with land degradation (e.g. salinity) and biodiversity loss. Implementation of actions has been through Blackwood Basin Group - government agency partnered projects, and externally funded projects. The group has developed decision-making tools, information collation, best practice demonstration sites, and a community Landcare grants program from financial support given by the federal government (Blackwood Basin Group 2000).

Meeting Structure and Decision-Making Procedure

The group met monthly. Meetings occur at locations throughout the basin to accommodate the distances representatives travelled and to maintain a presence in the Blackwood basin community. Meetings adhere to formal meeting procedures, similar to local government authority practices. Prior to meetings, a predetermined agenda is circulated to members, and meetings are open to the general community. Format for meetings consists of verbal reports by the different members with a Finance Report, Zone Management Report, Communications Report and Executive Officer’s Report outlining key activities. Past and current issues are discussed, generally through presentations and Chair facilitated discussions. Discussions are of a formal nature, and often with limited round table discussion. Group meetings provide a forum for policy and planning dialogue between community leaders and State government decision-

makers at the regional scale.

Decisions are made through formal decision-making processes using motions and voting. An Executive sub-committee makes some decisions outside meetings, which are later reported back to the main group. Intra-organisational and external meeting communications occur through weekly phone conferences. The majority of decisions were made by the whole group, with limited autonomy taken by the Executive Committee. This Executive Committee consists of a small number of group elected members. Decision-making was informed by State government agencies.

Avon Working Group (AWG)

Location

The Avon River Basin is an area of some 120,000 km^2 with a population of 54,000 people, and draining an area almost twice the size of the State of Tasmania (Figure 3.5). The region extends from Southern Cross in the east to Northam in the west, and bounds the Swan Catchment that incorporates Perth and the nearby subcatchment areas (Figure 3.6). There is a direct geographic relationship between the Avon and Swan, with the Avon River becoming the Swan River east of Perth. Land uses in the region include cereal, lupin production, wool production, mining and timber industries. The area's annual agricultural production is worth in excess of $2 billion (Swan Avon Integrated Catchment Management Coordinating Group 1997).

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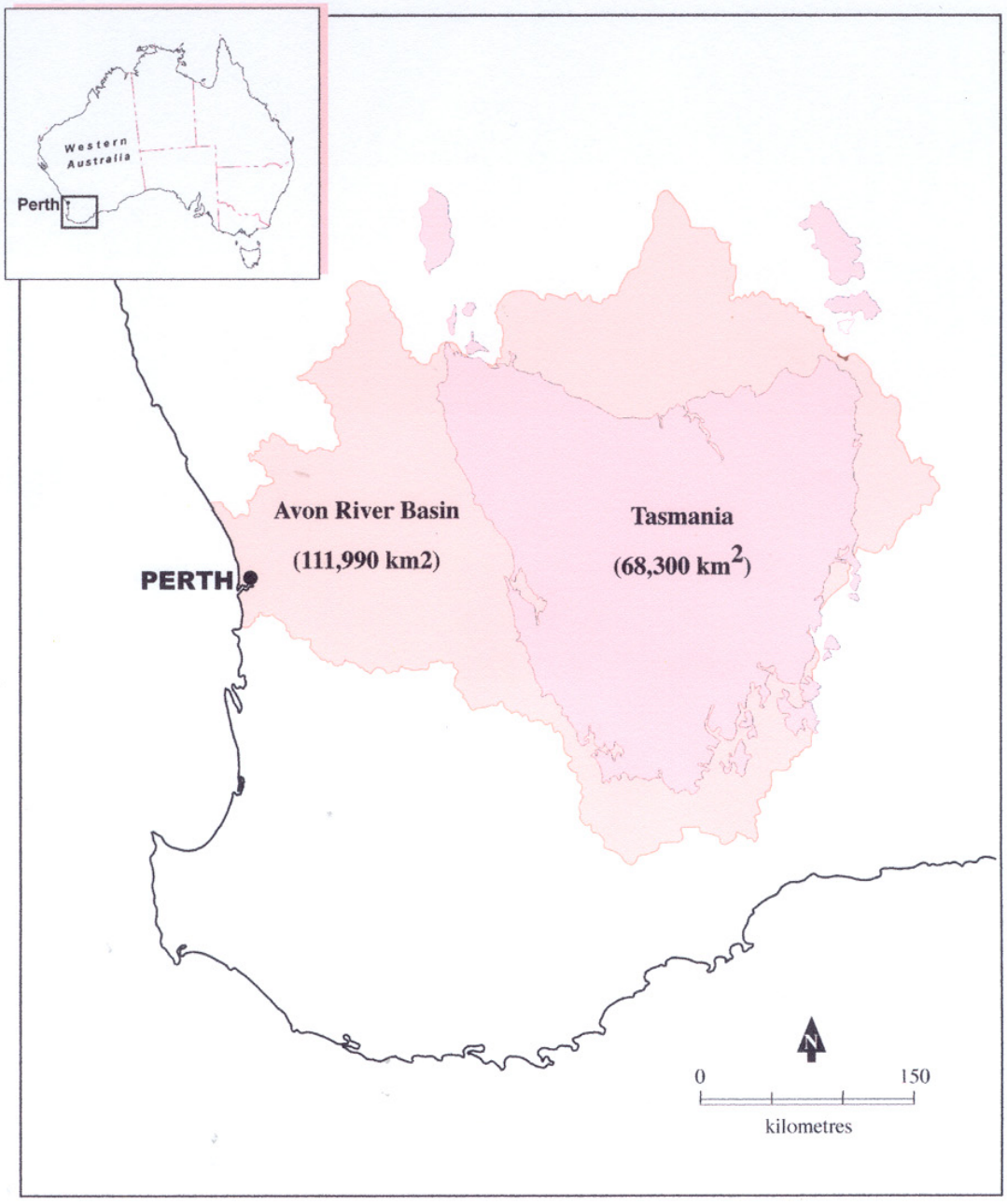

Figure 3.5 Size of the Avon River Basin to Tasmania.

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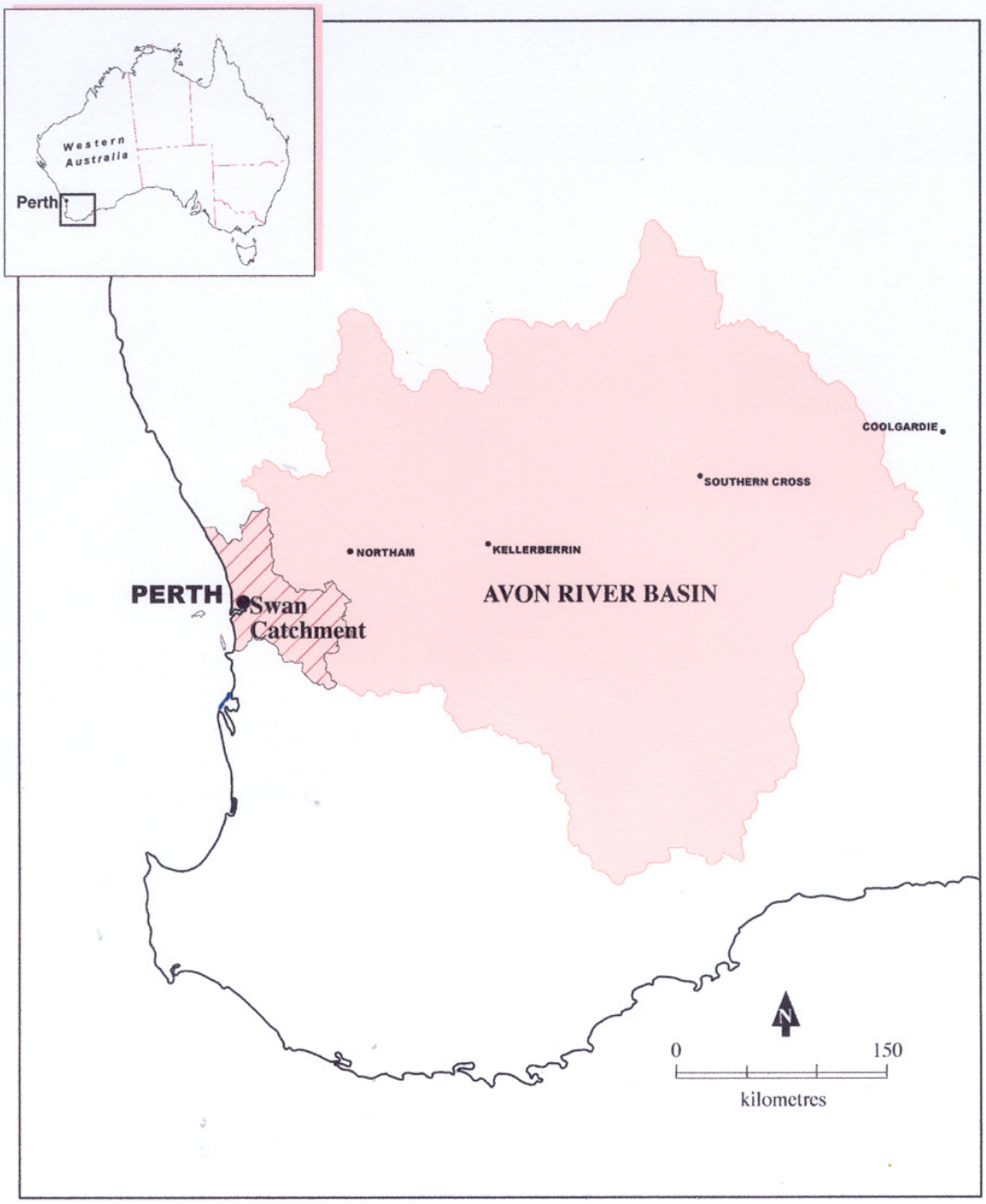

Figure 3.6 Location of the Avon Region to the Swan River Catchment.

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The geographic area of the Avon Working Group and Central Agricultural Regional Partnership Group both overlap and share some boundaries, having a similar area of geographical responsibility (Figure 3.3). In contrast, the South-West Regional Partnership Group covers a more extensive area than the Blackwood Basin Group.

Formation and Purpose

The Avon Working Group[2] formed in 1994 as part of the Swan-Avon Integrated Catchment Management Initiative; the first regional catchment initiative in Western Australia. This initiative was funded by the federal and State governments, and is now managed by the Swan-Avon Integrated Catchment Management Coordinating Group. This group functions to protect land and water resources in the Swan-Avon catchment. Membership on the Swan Avon Integrated Catchment Management Coordinating Group is by Ministerial appointment, and is currently comprised of members from the Avon Working Group and its sister group, the Swan Catchment Council. It also includes key government agencies with an independent Chairperson (Avon Working Group 1998). The Swan Avon Integrated Catchment Management Coordinating Group, and the two working groups are non-statutory.

The Avon Working Group's mission is "To contribute to the quality of life of the regional community, by ensuring sustainable management of natural resources in the region" (Avon Working Group 2000, p. 7). The associated vision for the region is "…that regional prospects for present and future generations are improved through sustainable use, enhancement and conservation of natural resources" (Avon Working Group 2000, p. 7). The Avon Working Group is the peak natural resource management community decision-making body in the Avon River region. The Avon Working Group

[2] The group has recently changed their name to the Avon Catchment Council.

was established for the purpose of integrating community and State government agency actions to provide input to the Swan-Avon Integrated Catchment Management Initiative. Although the group was initiated through regionalisation, it can now be regarded as an example of community-led regionalism. The group leads integrated catchment management in the Avon River Basin by linking local communities and government, and providing opportunities for coordinated actions of agencies with statutory powers.

Functions and Partnerships

The main function of the group is to undertake regional natural resource management planning at a strategic level, along with project management and implementation at an operational level. The Avon Working Group provides five key functions within the region: advocacy, facilitation and coordination, information brokerage, representation and funding of on-ground projects (Avon Working Group 2000; Huffer 1999). Another Avon Working Group function is to support the Swan Avon Integrated Catchment Management Coordinating Group, in conjunction with the Swan Catchment Council. The group functions as a natural resource management regional body by attracting resources through independent and joint community/agency proposals. It supports community initiatives, provides opportunities for community participation, and looks at the "big picture" through its regional focus. The group's informal partnerships were predominantly with State government agencies to facilitate sharing of ideas, pursuit of common goals, and access to funds for regional activities.

Membership and Representation

The Avon Working Group membership consisted of 16 members from the community, State government agencies, including the regional economic development commission,

and the education sector (Table 3.2). The group included nine community representatives from geographical areas across the Basin: three members from farming families in each of the three geographical catchments (Avon, Lockhart, Yilgarn). State government agency representation included Agriculture WA, WRC, CALM, and Main Roads. The Avon River Management Authority and Wheatbelt Development Commission were also represented. Recently, a representative from TAFE has jointed the Avon Working Group. There is a core group of founding members, whose experience provides continuity to the group. The government representatives are often the regional managers or senior regional officers. Government representatives had voting rights.

Community membership is open to all residents of the Avon River Basin. To get members with a connection to natural resource management, the candidates have to be nominated by two gazetted LCDC members and elected by the body. Each LCDC in the Avon River Basin has a single vote to elect an Avon Working Group member. Voting is on a preferential basis and confined to the catchment in which the LCDC is located (Huffer 1999). Members are elected for three years.

Activities

The group has undertaken strategic planning and produced a natural resource management strategy, *Avon River Basin Natural Resource Management Strategy – Natural Heritage Trust Report 2000* (Avon Working Group 2000), translating federal and State policies to on-ground activities. The activities of the group are facilitated by several support people, specifically a strategic planner, Executive Officer, and a promotions officer. The group's activities provide an important communication link between the community and State government agencies, allowing coordination and

integration of actions across the region.

In coordination with the Swan Catchment Council and Swan Avon Integrated Catchment Management Coordinating Group, the group has sought to implement a long-term vision for the Swan-Avon Catchment spanning 200 years. This 200 year vision foretells prosperous rural and urban communities which have taken responsibility for the management of the landscape, so as to ensure the protection of biological diversity and the maintenance of ecological processes. Communities will be working together cooperatively to enhance the social, economic and environmental well-being of present and future generations (*Working Together - A Recovery Action Plan for the Swan-Avon Catchment 1997-2007* – Swan Avon Integrated Catchment Management Coordinating Group 1997).

The Avon Working Group seeks to advance integrated catchment management by taking an integrated approach. It coordinates on-ground activities across the basin through project management, information brokering and representation of community interests. It also determines the regional priorities, and provides information and advice to the Natural Heritage Trust. Members play an important role in lobbying for regional issues and attracting resources. The group also supports community initiatives, instigates new projects and secures new opportunities.

Meeting Structure and Decision-Making Procedure

The group meets approximately 6 times per year, with meetings planned to coincide with external submission deadlines for funding applications and planning deadlines. Meeting are conducted at different locations around the basin, as part of raising community awareness, and to enable representation to the group by LCDC members

and community landcare coordinators. A semi-formal meeting process is used by the group, facilitated by the Chairperson and Executive Officer. Meetings involve round table discussions of agenda items, with the presentation of member reports, raising of issues of concern, presentations by project staff or experts in relation to new or continuing projects, and progress updates from sub-committee members.

The group frequently made important or controversial decisions by voting. Otherwise, consensus was used to reach shared agreements that satisfied all members. The group made decisions after "round table" discussion and presentation of information by key informants. Sub-committees, include members of the Avon Working Group, and assist in decision-making and project management (Huffer 1999). Formation of sub-committees allowed issues to be progress in a timely fashion outside of the main group. There was a community landcare coordinator sub-committee, strategic planning sub-committee, and other issue-based committees formed as needed. To assist in the functioning of these committees, the group utilised teleconferencing facilities to overcome the geographical distances separating members. Limited decisions were made outside of meetings by the Executive, with most decisions being made by the collective group.

LAND CONSERVATION DISTRICT SCALE

Dumbleyung LCDC

Location

Dumbleyung LCD is located within the Shire boundaries of Dumbleyung, and includes the towns of Dumbleyung and Kukerin in the upper Blackwood Basin of the South-West region. The LCD covers an area of 2,553 km^2, and consists of rural farmlands of predominantly wheat and sheep. The town of Dumbleyung is approximately 268 km

south-east of Perth (Figure 3.7).

Formation and Purpose

Established on a Shire basis, the LCDC was gazetted under s22. *Soil and Land Conservation Act* 1945 (WA) in 1987, and it is one of the first LCDs formed. The purpose of the group is to support soil and land conservation within the Dumbleyung Shire boundary area, providing education, support and coordination for Landcare activities in the district. The vision and goals of the LCDC relate to targets set by the Blackwood Basin Group. The group's priority goals are maintaining a coordinator, Landcare education, catchment planning, salt mapping, supporting catchment coordinators, revegetating discharge areas, keeping water on farms and drainage issues (Hadlow pers comm. 1998).

Functions and Partnerships

General functions of the group are to undertake land management activities, and to support Landcare groups in the Shire. The LCDC is frequently asked by the Commissioner for Soil and Land Conservation to comment on draft State policy relating to soil and land conservation issues, such as clearing of regrowth. At different times, the group manages projects and carries out works for preventing, remedying or mitigating land degradation, and promoting soil conservation and reclamation.

The group is based on informal partnerships, with two main partners contributing specific resources and providing a range of opportunities. Local and State government agencies are partners, and this allows for the exchange of information and pursuit of common outcomes. For example, local government provides financial support, administrative services and a connection to a tier of government.

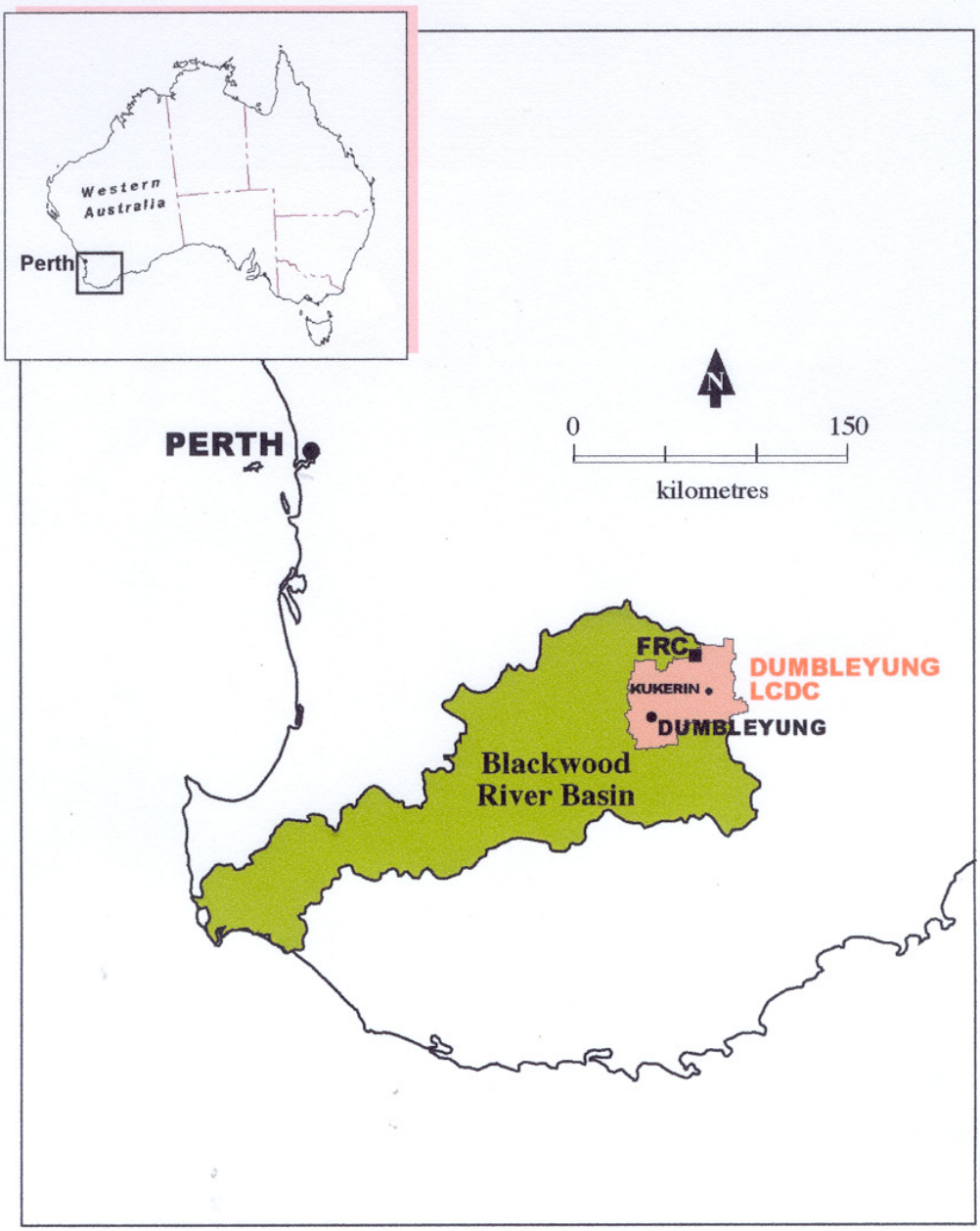

Figure 3.7 Case Study Locations in the Blackwood River Basin.

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Membership and Representation

The LCDC is a group of community people, mostly landholders, who want to deal with land degradation. Other members on the group are local council representatives, government officials, and persons with community and land conservation interests (Avon Catchment Network 2002).

Membership of the LCDC is determined under section 23. of the *Soil and Land Conservation Act* 1945 (WA), and consists of a community representative from each of the [sub]catchment groups in the Shire, local government representatives, subcatchment coordinator, member of WA Farmers Federation, special interest groups and persons from the State government agency of Agriculture WA (Commissioner for Soil and Land Conservation[3]). Members are appointed to the LCDC after nomination by their respective subcatchment groups and parent organisations. All of the subcatchments located in the Dumbleyung LCD area had elected representatives from those subcatchment groups on the LCDC.

There were 18 members on the committee, and the membership term was three years. Individuals are nominated by their subcatchment groups or parent organisations, and gain membership through "*being persons actively engaged in, or affected by or associated with, land use ... in the soil conservation district*" (*Soil and Land Conservation Act* s.23(2b)(d)). State agency representatives are selected from their regional centres, and function to provide information to the group on current agency programs, projects, and new policy development. Representation from the

[3] The Commissioner for Soil and Land Conservation office is delegated to an Agriculture WA officer and operates in cooperation with other state government agencies to deal with land conservation and management issues on rural land in the agricultural areas of the State. They are involved in safeguarding the conservation and biodiversity values of native vegetation, and preventing land degradation from practices such a drainage etc. The functions, duties and powers of the Commissioner are outlined in the *Soil and Land Conservation Act* 1945 (WA) (sections 13, 14, 15).

subcatchments facilitates the communication and coordination of shared activities across groups within the Shire. The Shire's involvement provides support for the group's activities through the finance and administration associated with the functioning of the group.

Activities

The group provides community input and management advice at local level to subcatchment groups and State government agencies, acting as the interface between community groups and the government. Communication of subcatchment activities and issues is carried out through representatives reporting on their group. Activities of the group include dealing with issues of land clearing, drainage, and unformed road reserves, employment of a community landcare coordinator, revegetation of gravel pits, roadside vegetation surveys, fox baiting programs, and a desktop survey of the impacts of deep drainage. The LCDC acts to provide Landcare education within the group for subcatchment and farm planning, and to the communities within the LCD area. To achieve greater awareness and communicate their activities, the LCDC publishes a bi-annual newsletter for distribution to Landcare groups and the wider community. The group communicates with the Blackwood Basin Group, and receives advice on matters relating to the Blackwood Basin.

Meeting Structure and Decision-Making Procedure

The group meets regularly every two to three months, except for two months when seeding and harvesting are occurring. Day meetings are held in the towns of Kukerin or Dumbleyung. On different occasions there are visitors from State government agencies, guest speakers or interested local community people attending meetings. Meetings are structured affairs, with an agenda and formal meeting procedures. Most meetings

involve the raising of problems and issues, presentation of information, and discussions. Reports are presented to the group from the Chairperson, Blackwood Basin Group representative, Lucerne Growers Association, Dumbleyung Landcare Zone and representatives of the subcatchment groups from within the LCD area. Correspondence received from different organisations, government agencies and individuals is also discussed.

Group actions are decided through the use of motions, with vote-taking occurring when necessary. The decision process involved members putting forth a motion that is either moved and seconded or defeated. Members are required to vote on issues pertaining to drainage and clearing. All members have an opportunity to participate in group discussions, raise concerns and voice their opinions in support for or against proposed actions. Decisions are reached through the support of motions by a seconder and majority vote. For this group, decision-making is generally not focused or strategic, with these problems exacerbated by on-going conflict between some members regarding drainage. No mediation process is apparent for addressing and resolving this conflict.

Goomalling LCDC

Location

The Goomalling LCD is located within the Goomalling Shire, situated in the central wheatbelt of Western Australia. The Shire encompasses the townsites of Goomalling and Konnongorring. The town of Goomalling is approximately 132 km north-east of Perth, covering an area of 1,843 km^2 within the Avon catchment of the Avon River Basin (Figure 3.8). The area is predominantly sheep and wheat producing country.

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Figure 3.8 Case Study Locations in the Avon River Basin.

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Formation and Purpose

In 1989, the Goomalling LCDC was gazetted under section 22. *Soil and Land Conservation Act* 1945 (WA). The group's role is to support soil and land conservation within the Goomalling Shire boundary area. Other purposes include restoring and conserving remnant vegetation, and progressing sustainable agriculture (Goomalling LCDC 1996). The LCDC's role involves providing administrative support to subcatchment groups, and allowing each subcatchment group to be responsible for setting their own direction and implementation. The group's objectives include: forming more subcatchment groups; developing a revegetation strategy for the Shire; establishing support, trials and field days; continuation and support of the community landcare coordinator; and progressing tax credits. Objectives to direct group actions are set every three years, and coincide with new membership terms (Goomalling LCDC 1996).

Functions and Partnerships

The LCDC's formal functions are the same as those given for the Dumbleyung LCDC. The group's objectives and plans are communicated to the regionally- based Avon Working Group to inform the latter's strategic natural resource management plan. The LCDC performs an important function of liaison between the rural communities and the Avon Working Group, together with the coordination and distribution of information between subcatchment groups.

The group's informal partnerships were centred on local and State government. State government agencies involved with the LCDC who undertake joint activities are mainly Agriculture WA and CALM. Local government provides opportunities for the group to function effectively, and the resources to implement projects that have benefits across

the Shire. The LCDC are the link to rural communities, and a source of information and feedback to governments.

Membership and Representation

As for the Dumbleyung LCDC, the membership is prescribed under section 23. of the *Soil and Land Conservation Act* 1945 (WA). The membership of the Goomalling LCDC is comprised of farmers, local government and an Agriculture WA person (Commissioner's nominee). There are 13 members on the committee, with meetings being attended by the community landcare coordinator, and often a local Avon Working Group representative. Members are either self-nominated or nominated by their respective groups/organisations. The group calls for LCDC nominations through the Shire's newsletter. Membership mainly comprises persons actively engaged in, affected by, or associated with land use in the district. It incorporates a representative from each subcatchment. The Shire is represented by the Chief Executive Officer, who acts as the secretary. Shire involvement plays an important supporting role, enabling the group to function effectively, and facilitating joint ventures between the Shire and the community. The community landcare coordinator's role is to act as an information broker for the LCDC and subcatchment groups. The Commissioner's nominee is often absent, being informed through meeting minutes.

Activities

Group activities are linked to their set objectives, and involve a roadside vegetation survey of the Shire, revegetation of the verges of main roads, support for subcatchment group development, and guidance and assistance for subcatchment group formation. Many activities of the group are focused on maintaining the remnant vegetation and biodiversity of the district through fox-baiting programs and tree planting schemes. At a

strategic level, the group conducts strategic planning with Agriculture WA to identify and clarify their group's mission, goals and objectives. Subcatchment reporting by representatives from each of the subcatchments within the LCD allows the sharing of information. Also, the group actively lobbies politicians and other LCDCs to progress Landcare issues. Another activity includes their role in providing feedback on draft State natural resource management policy issues, such as clearing of regrowth.

Meeting Structure and Decision-Making Procedure

The group meet ten times a year. Meetings are formal, with an agenda and meeting minutes taken. Meetings are held in Goomalling at the Shire chambers in the evenings. The purpose of meetings is to share information between the subcatchments, Shire and community landcare coordinator, and to disseminate information received from correspondence. Each subcatchment representative and the community landcare coordinator give verbal reports at meetings, and these cover recent activities and points of interest. General business allows discussion of upcoming events, funding opportunities and Landcare activities. Meetings are open for the public to attend, and the group often has guest speakers attend to talk on sustainable agricultural practices, new innovative enterprises etc.

Group decision-making is through formal motions and voting. Members vote on group actions to be undertaken, and voting is through a show of hands. The decision process involves presentation of information followed by group discussion of options and solutions. All members have an opportunity to contribute to discussions, and the Chairperson facilitates and directs discussions when needed. Conflict within the group is minimal, with most issues of concern and differences of opinion being aired and resolved at meetings.

SUBCATCHMENT SCALE

Gabby Quoi Quoi Catchment (GQQ)

Location

The Gabby Quoi Quoi Catchment is located about 160 km north-east of Perth in the Western Australian wheatbelt, 30 kms north of Goomalling (Figure 3.8). It is part of the Avon Catchment in the Avon River Basin. Located in the Shires of Goomalling and Wongan Hills, the Gabby Quoi Quoi subcatchment covers 20,784 ha, and includes 28 financial members from 13 farming families, and lies within the Goomalling LCD. There is a mixed bag of farming operations within the subcatchment, with a range of farming systems, farm sizes and financial situations. The average farm size is 1,794 ha, with 13% of the land in the subcatchment non-arable through salinity encroachment (Edkins 1998).

Formation and Purpose

Formation of the Gabby Quoi Quoi group was instigated through the Goomalling LCDC, whose primary objective is to form subcatchment groups in the Shire to manage land degradation. The group formed in October 1989 after a meeting of local farmers, motivated by the need to tackle land degradation on a whole catchment approach. Shortly afterwards the group approached Alcoa World Alumina Australia, a mining company looking for suitable subcatchment groups to become involved in their Landcare Vision Project (see Chapter 2, section 2.1). The group looked to Alcoa to sponsor the group's Landcare projects, and to assist in them operating as a demonstration subcatchment. The group's purpose is to tackle degraded areas to prevent further salinity, erosion and water logging, and save arable land for production (Landcare Vision 1996).

Functions and Partnerships

The group functions to maximise productivity and sustainability by both restoring degraded areas and reducing land degradation (Edkins 1998). A goal setting exercise in 1998 by the group produced a list to direct their actions. These objectives include: maximising water use and reducing land degradation; restoring and revegetating degraded areas; and improving profitability through Landcare (Edkins 1998). The group relies on numerous partnerships to achieve these objectives. The group has a formal tripartite partnership with Alcoa of Australia and the Department of Agriculture.

The group has informal partnerships with government, industry and research institutions. Each partner provides specific expertise and information to increase production, future viability and sustainable agriculture. Partnership with the State government involves the Water and Rivers Commission, as joint participants in an Avon Water Quality project funded by the Natural Heritage Trust. A second Natural Heritage Trust joint project is a programme of remnant vegetation protection and revegetation within the subcatchment. Another partnership involves partners (industry and university) working on optimising pasture/crop rotations, and determining the effect of annual and perennial species on soil condition (Edkins 1998). Informal partnerships also exist between landholders within the subcatchment working together on specific problems across farm boundaries.

In February 1999, the group also became involved in a nature conservation project called Living Landscapes.[4] The project is managed and sponsored by Greening Australia (WA), a non-government organisation, with additional sponsorship from

[4] The Living Landscapes project is focused on protecting the ecological health of landscapes by integrating nature conservation in production landscapes. The project is underway in the wheatbelt of Western Australia, and it provides a framework for multiple stakeholders to be engaged in on-going discourse (Gowdie & Lambeck 2001). Living Landscapes seeks to deliver a partnership approach through social learning and collective planning.

Alcoa World Alumina Australia. The objective is protection of biodiversity within economically viable and sustainable land use systems, through assisting community to develop landscape practices (Frost et al. 1999).

Membership and Representation

The membership of the group consists of 24 families representing fourteen farming units within the subcatchment. Membership is open to landholders within the subcatchment boundaries. The group is comprised of every farming family in the subcatchment. Several members from each farming family have been actively involved in the group since its formation. Families are often represented by husbands, with other family members (sons, brothers, wives) also attending the group meetings and activities. There has been a conscious effort to include all members of the family in the group. The meetings are regularly attended by at least five women who take an active part in the group and subcatchment activities, some through their wider community and Landcare involvement. The women who attend are often from families whose husband and members of the extended family are deeply committed to Landcare, and it forms an important ethos of the family and farming business.

Members are nominated and seconded to positions on an Executive Committee, namely, President, Vice President and catchment coordinator. The group has a Landcare Vision Tour Coordinator as part of a five member sub-committee to coordinate tours around the demonstration sites of the subcatchment. It also has a sheep lice eradication officer. The group has a representative on the Goomalling LCDC, and a member of the group is also a member of the Central Agricultural Regional Partnership Group and former member of the Avon Working Group.

Activities

Group activities include joint planning, developing goals, and creating a catchment plan integrating individual farm plans. On a yearly basis the group plans and budgets for the forth-coming year's activities. On-ground activities across the subcatchment involve treating saltland, establishment of shelterbelts, replanting of deep sand country, protecting remnant vegetation and revegetating creeklines (Landcare Vision 1996). Working across farm boundaries has allowed implementation of their plan on a whole-of-subcatchment basis.

Other activities by the group include: field days with neighbouring subcatchment Botherling Springs, on-going water monitoring of Gabby Quoi Quoi Creek, a soils testing program, and tours of the subcatchment to view demonstration sites.

There has been extensive activity in the subcatchment involving government, non-government and academic institutions conducting projects and undertaking research. One example is the Commonwealth Scientific and Industrial Research Organisation trials on soil microorganisms, lime, summer fodder, fertiliser rates/leaching and perennials. Several subcatchment group members are involved in project management, and updates are provided to the group by the researchers on the trials. Collaboration with research institutions through action learning processes provides the means for the group to acquire greater technical knowledge than currently held by government agencies (Nabben 1999), and source solutions with specific local relevance.

The group has been actively involved in the Focus Catchment process, with its focus on implementing change to protect productive agricultural land. The group continues to apply for funds from government and other sources to implement Landcare works.

Meeting Structure and Decision-Making Procedure

The group has a highly structured meeting process following a written agenda. Meetings are directed by an elected President. They are formal and proceedings are recorded, with members receiving copies of the meeting minutes. Scheduling is mainly during the day to encourage families to attend. Meetings are generally four times a year, and conclude with a social function. They are conducted in a Shire community hall in the subcatchment. Group displays and information are stored here.

Attendance at meetings is generally high, with at least one member from each family present. The community landcare coordinator for the Goomalling and Dowerin Shires attends. They function as a communication networker, information source and support for the group. Their role involves: reporting on activities in the area, communicating between the subcatchment groups, bringing new Landcare information to the group, providing updates on projects, and outlining opportunities for group funding and individual incentives. There is often attendance by the Alcoa representative, and a report given of current activities and future plans. An annual report is presented by the Commonwealth Scientific and Industrial Research Organisation and The University of Western Australia on their trials in the subcatchment, to provide information on improvements to management practices. Guest speakers and invited guests include researchers, agricultural specialists and State government agency personnel.

Decisions are made through the putting forth of motions. Successful motions are seconded and accepted. General consensus on issues and solutions are attained within the group, with vote taking when necessary. All members have the opportunity to put forth their points of view, concerns, and bring forward issues for group discussion. The President takes a strong leading role in facilitating the group’s decision-making process.

The decision-making of the group is assisted by the involvement of the Alcoa representative, who is a valuable information source and facilitator. The person's role is to protect and manage the corporate sponsor's past and on-going investment in the subcatchment, and the company's image as a credible and respected agricultural adviser (Moore et al. 2001). This person plays a pivotal role in some of the group's major decisions.

Wallatin Creek Wildlife and Landcare Inc. (WWL)

Location

The Wallatin Creek Wildlife and Landcare Inc is a Landcare group in a subcatchment of the Yilgarn catchment of the Avon River Basin located in the Central Agricultural wheatbelt of Western Australia (Figure 3.8). The subcatchment is approximately 220 km east of Perth, within the Shire of Kellerberrin and the boundary of the Kellerberrin LCD. The subcatchment covers an area of 26,066 ha, and extends north east of Doodlakine, and 15 kms from Kellerberrin. The subcatchment consists of 19 farming families, with the main agricultural production being livestock and cereals.

Formation and Purpose

The upper Wallatin Creek Catchment Group formed in 1984 in response to a request by the Kellerberrin LCDC for groups to address the presence of land degradation problems in the Shire. The group expanded, and in 1993 landholders of the Upper Wallatin Creek catchment sought funding and undertook a major joint revegetation demonstration project with the Commonwealth Scientific and Industrial Research Organisation. Initiation was based on concerns regarding declines in the natural resources. Later the lower Wallatin subcatchment was included, and in July 1996 the Wallatin Creek Wildlife and Landcare Inc. group was formed. The group recognised the need to work

on a subcatchment scale to achieve social and economic benefits through improved productivity, and to reduce land degradation problems. In 1998, the subcatchment expanded to include the neighbouring O'Brien Creek, due to the shared land ownership across the two subcatchments.

The purpose of the group is to increase landholders' knowledge of the subcatchment and the associated land degradation issues, and to develop ways of addressing subcatchment problems through farm scale action. The group identified the problems within the subcatchment, which included flora/fauna decline and a range of other land degradation issues. As a Focus Catchment, the group identified the problems to address, which included: salinisation of land; soil degradation (erosion, waterlogging, acidification); wind erosion; and native flora and fauna decline (Lawson, 1998).

Functions and Partnerships

The group's long-term goals include: improving agricultural production and farmer knowledge; enhancing nature conservation and control of feral animals; and reducing the salinisation. The strategies identified to achieve these goals ranged from increased research in the subcatchment to becoming a Focus Catchment (Wallatin Creek Catchment 1996). The group has also recognised the need for integrating nature conservation, as part of their subcatchment planning, to assist in maintaining the sustainability of the subcatchment.

The group was involved in partnerships with both State government and a research institution, on an informal basis. Involvement with the Commonwealth Scientific and Industrial Research Organisation has been an ad hoc process. Informal collaboration between landholders seeking to implement improvements through joint activities, is

another example of an informal partnership. Participation in the State government's Focus Catchment process has involved a more structured process.

Membership and Representation

Membership of the group consisted of landholders within the boundaries of the subcatchment. The 19 farming families in the subcatchment have either the husband or son attending meetings or activities. Involvement by women in the group consists of only a few women from the more progressive Landcare families and other interested parties. There is one female group member on the five member Executive Committee. The community landcare coordinator has made a concerted attempt to involve more women in Landcare activities, and to assist in building their interest.

The group has members who also sit on other groups and committees, such as the Kellerberrin LCDC, Avon Working Group and the Soil and Land Conservation Council. Cross-group representation provides the group with new information, and a bigger Landcare picture.

Activities

The group has undertaken extensive Landcare activities over the years, including funding applications, nature conservation planning, and catchment planning, plus on-ground activities such as pest eradication, planting tress to reduce recharge, stabilising saline areas, protecting drainage lines, and linking remnants for wildlife corridors. On numerous occasions the group has ignored farm boundaries, allocating a percentage of the group's Natural Heritage Funds funds for works on a non-member's farm. The group recognises the benefits for the whole subcatchment of concentrating on problem sites wherever they may be in the area. They are recognised as a progressive farming

group, so subsequently they have been a demonstration catchment for other groups. The group is assisted in subcatchment planning and management by a community landcare coordinator employed by the Kellerberrin Shire, Agriculture WA and the Natural Heritage Trust.

In the past 16 years, a great deal of research and Landcare work has been conducted in the upper subcatchment. This work has been carried out by the Commonwealth Scientific and Industrial Research Organisation, and Agriculture WA. It involved ecologists, hydrogeologists and agricultural consultants. In 1996, the group was chosen as a Focus Catchment group to participate in subcatchment planning. It was charged to develop best practice management and become a demonstration catchment for on-ground works for other groups.

The group has been successful in gaining National Landcare Program and Natural Heritage Trust[5] funds from the federal government to implement on-ground Landcare works in their catchment. The group recently received funding to implement the Wallatin Nature Conservation Project, enabling implementation of a strategic and integrated nature conservation plan developed by the Commonwealth Scientific and Industrial Research Organisation - Wildlife and Ecology Division. The project aims to address land conservation and production issues, with joint project objectives of "species retention" through protecting, rehabilitating and restoring the native vegetation, and the amelioration of land degradation (Lambeck 1999). As part of their species retention objective, the group undertakes regular fox baiting. To assist in their nature

[5] Natural Heritage Trust provides the financial support for addressing and improving natural resource management problems for a better environment in Australia. It does this through funding community and government agency partnership for on-ground action, to achieve integrated and sustainable natural resource management at farm, subcatchment, and regional scales. Natural Heritage Trust supporting Landcare as an individual and community-led initiative has action through partnership for sustainable natural resource management as one of its goals. The federal program seeks to "promote community, industry and governmental partnership in the management of natural resources in Australia" (AFFA 2001).

conservation efforts, signs are placed throughout the area identifying the Wallatin subcatchment and highlighting the local species.

Meeting Structure and Decision-Making Procedure

The group has quarterly meetings, conducted generally in the evenings, at the local community hall. A social element is included to allow informal discussion between members. Meetings are formal affairs, with a set agenda and standard meeting procedures. Minutes are taken and circulated to members after the meeting. Meetings also include updating of the subcatchment's wildlife register of any new species sighted in the area. Decisions made during meetings are through formal motions and voting. Consensus decision-making sometimes occurs to some degree, but action is also confirmed through motions and a "show of hands".

The group is progressive in seeking out information, and involving external organisations and individuals who can assist them in implementing subcatchment activities. This also includes opportunities for providing innovative options and locating research projects in the subcatchment. Often there are invited speakers attending meetings to provide the group with information, or to involve them in activities.

An elected Executive Committee of five members has the responsibility for making decisions out of meetings, minimising the number of times the group must meet. Members trust these selected members to progress the group's goals on their behalf.

Fence Road Catchment (FRC)

Location

The subcatchment is located in the South-West agricultural wheatbelt area,

approximately 250 km south-east of Perth and 40km north-east of Dumbleyung. The Fence Road Catchment covers part of the Dumbleyung, Kulin and Wickepin Shires, and is part of the Dumbleyung LCD. It is situated in the north-eastern region of the Blackwood Basin, which is managed by the Blackwood Basin Group (Figure 3.7). The subcatchment encompasses an area of 41,480 ha and is comprised of 25 farming properties, with nearly 100% participation by farming families. The general farming systems are mixed cropping and sheep. The main land degradation problem in the subcatchment is salinity, due to rising groundwater. The problems are predominantly in the lower third of the catchment on hillside seeps, and valley salinity in the upper third of the catchment area (Whitfield 1998).

Formation and Purpose

The catchment group formed in March 1992 through the efforts of the community landcare coordinator, and interest by the local farming community. Identified reasons for working together as a group were: dealing with soil erosion; attracting expertise, knowledge and funding to improve farm practices and sustainable production; and coordinating soil conservation by integrating farm planning on a subcatchment basis (Fence Road Catchment 1998).

The Fence Road Catchment is a group committed to raising the awareness and adoption of sustainable agricultural practices, with implementation of innovative technology and strategies to combat land degradation (Fence Road Catchment Information Profile, unpublished, 1997).

Functions and Partnerships

Functions of the group are two-fold. Firstly, promote sustainable agricultural practices

and secondly, to coordinate community Landcare activities. The group is committed to the implementation of sustainable agricultural practices within the subcatchment, as evidenced by the members supporting a $250 levy for each farming enterprise to employ a local person to coordinate group activities and progress the group's goals.

The group's goals seek to deliver innovative technology and strategies to enable the implementation of sustainable agricultural practices, and to raise the community's awareness and uptake of sustainable agricultural practices. The two areas the group has focused their attention on are: nature conservation through protecting and preserving remnant vegetation, and controlling land degradation (e.g. surface and subsurface water movement, salinisation of land).

The group is involved in informal partnership with State government, mainly Agriculture WA, and are actively engaged in pursing joint outcomes and a level of shared understanding through the Focus Catchment process. There is also some degree of collaboration between landholders who seek to work collectively to address cross-boundary land degradation issues.

Membership and Representation

The group membership is comprised of 25 local landholders in the subcatchment. Often several individuals from each farming family attend, and meetings have a good level of involvement from younger farmers. The presence of women at meetings is small, with only several wives and the catchment coordinator attending. There was a Chairperson, Secretary, Treasurer and subcatchment coordinator in attendance in all meetings observed, but no elected Executive Committee.

The Fence Road Catchment is represented on the Dumbleyung LCDC, and since September 1998 on the Dumbleyung Landcare Zone Committee[6] in the Dumbleyung Shire. Until 1999, the Chairperson of the group was a long standing Chairperson for the LCDC, and is the current Zone Vice-Chairperson. It is intended that the Fence Road Catchment, will have its Focus Catchment process extrapolated to other subcatchments within the Dumbleyung Landcare Zone.

Activities

The group has conducted several Landcare activities. Some are on-going, while others have been one-off funding opportunities. Fox baiting is an on-going activity undertaken by the group, and was coordinated on a Shire basis. Other activities have included field days, farm planning days, subcatchment tours with hydrologists, tree planting, fencing of valuable remnant vegetation, and employment of a part-time project coordinator.

The group has been successful in obtaining funds from numerous organisations (Blackwood Basin Group, Greening Australia (WA), Gordon Reid Foundation) to: collect seed for revegetation of a gravel pit, build a dam for farming black bream (a fish), revegetate and fence works, and implement flora and fauna surveys with group members, and the Wildflower Society, and bird surveys. Technical expertise has been provided through a private nature conservation consultant and the Commonwealth Scientific and Industrial Research Organisation - Wildlife and Ecology.

An aim of the group is to have 20% revegetation of the subcatchment over a ten year period, with a few members already having 20% of their farms revegetated. Nature

[6] The Dumbleyung Landcare Zone Committee is a formal consultative and administrative committee that formed to facilitate the development of the Zone Action Plan developed by the Blackwood Basin Group. The Committee comprises representatives of the sixteen subcatchments situated within the Zone, State and local government authorities, and representatives of interest groups.

conservation is practiced through the control of noxious weeds and pests, and the identification, protection and revegetation of remnant vegetation. The group also aims to control salinity and soil erosion through the adoption of best practice land management strategies, and surface and sub-surface water control. The monitoring of land degradation and the establishment of local information databases function to inform the group.

Planning at the farm and subcatchment level has been an on-going activity for members, as part of their Focus Catchment process with Agriculture WA. This process has entailed planning workshops and farm visits, as part of producing an action plan for the subcatchment.

Meeting Structure and Decision-Making Procedure

The subcatchment meetings are formal affairs, with approximately 3-4 meetings per year. Meetings are generally held during the day at the local community hall. Often there are invited guests who talk to the group about Landcare activities and new farm enterprises, such as oil mallees, and no-till farming. Reports are presented by the Chairperson and the Dumbleyung LCDC representative. The subcatchment coordinator is an appointed member of the group and at each meeting they present a report to the group on activities undertaken, and distribute a written report. When the group was supported by a government funded community landcare coordinator, an update on Landcare activities, funding opportunities and information was given. The Chairperson directs the group discussions, ensuring all members have an opportunity to contribute their views. Most meetings are well attended by at least one family member.

The group makes decisions through a formal process of motions and voting, similar to other subcatchment groups and the LCDCs studied. Future actions are agreed upon after

discussion has occurred amongst members.

3.3 Decisions Studied Within Each Case

This research relied on analysing how decisions are made, to describe organising and decision-making as part of social sustainability. The decisions, presented here were chosen after discussion and consultation with group members and support staff (e.g. regional managers, subcatchment coordinators, Executive Officers) and their identification of the decision as a major and on-going activity of the group. For each decision, details are given on the "problem", who was involved in decision-making, and the outcome.

State Scale

Soil and Land Conservation Council

The Council's decision-making on drainage reform, specifically development of policy, was the decision studied. The Council was involved in the issue of drainage as early as 1993, prior to the responsibility for drainage reform being passed to them by the State Salinity Council in 1997. From 1997, the Council became very active in overseeing reform of drainage regulations and activity within the State. The Council continued to play a role in the process, albeit it be more of an observer role, when the Minister of Primary Industry and Fisheries established a Deep Drainage Taskforce in August 1999. This was the situation until March 2000, when the Deep Drainage Taskforce Report and Recommendations were released.

Under the Salinity Action Plan (Government of WA 1998), the Soil and Land Conservation Council was charged with the responsibility for overseeing the reform of

drainage regulations and activity.[7] This drainage reform has been driven by Agriculture WA, and they have bought to Council reports for advice and endorsement at critical stages. The Commissioner of Soil and Land Conservation's role is to report to the Council on regulatory action in relation to notices of intent to clear and drain.

Details of the process undertaken by the Council follow, from problem identification to the outcome to date. As outlined in its 1999 Annual Report, the Council has advanced the drainage reform process to the point where it has produced:

- a set of policy principles accepted by the State Salinity Council;
- development of comprehensive best practice guidelines through a consultative process led by the Avon Working Group;
- development of a streamlined assessment process for cooperative group proposals; and cooperation with contractors on training and professional accreditation (Soil and Land Conservation Council 1999).

As early as August 1993, the Council was aware of problems associated with drainage policy, specifically the drainage "notification of intent" regulation was not working in terms of facilitating a comprehensive, subcatchment approach to addressing drainage proposals. The regulation was operating successfully within its intended scope, namely, to make government agencies allow input from communities into drainage. But its effectiveness was debatable, with a high level of illegal drainage, or un-notified drainage occurring (Soil and Land Conservation Council 1993). A general drainage

[7] Drainage as a land management practice was the centre of controversy in Western Australia for a number of years as community and government deliberated over the effects of deep drainage, and the usefulness of this tool to solve the salinity problem, particularly in the lower rainfall areas. The problems included a lack of whole of government approach to drainage, perception of government inaction and negativity to drainage, emergence of "stand alone" and poorly integrated drainage proposals, disagreement over engineering approaches, and potential for damage to downstream properties with and without drainage (Deep Drainage Taskforce 2000).

strategy for the whole South-West of the State, independent of what is expected by the community for different catchments, was viewed as unworkable. The problem was complicated further by the delay in the Notice of Intent assessment/advice process. The Executive Director for Sustainable Rural Development at the time expressed to the Council the need for immediate changes in the assessment of drainage Notice of Intents, provision of better information about proposed drainage by landholders, and improvement of existing written information on drainage management. Compounding the issue was the need to identify parts of the landscape of high nature conservation value to protect them from the impacts of drainage. Pressure for reform arose from problems, including: lack of integration across State agencies, ineffectiveness of current administrative frameworks, and lack of accountability to the community. Overall, the drainage issue was premised on a problematic administrative procedure, lack of coordination and agreement across government agencies, increasing community conflict, and dissatisfaction arising from the lack of information. Central to the issue was the uncertainty and confusion over definitions and forms of drainage, due to the lack of a clear definition of “notifiable” drainage.

During the period the Council has been involved in the drainage reform process, parallel processes have been conducted by other government and non-government organisations to address the problems associated with this land management practice. At the regional scale, regional groups, such as the Blackwood Basin Group and the Avon Working Group, have initiated investigation into drainage, due to community concern. A draft drainage policy document was produced by the Blackwood Basin Group through a drainage workshop conducted in 1993, but has yet to be progressed or acted on. In 1997, the Avon Working Group initiated a drainage project, funded through the State’s Salinity Action Plan, aimed at developing sensible guidelines for drainage, and

agreement by the community on what are acceptable and unacceptable drainage practices. A number of drainage policies exist, and the Blackwood Basin Group, WRC, and National Parks and Nature Conservation Authority have all developed their own policies.

At the LCD and subcatchment scales, efforts were directed by community to deal with drainage issues at a local level. There was an instigation of deep drainage investigations, and liaison with government scientists, managers, and drainage contractors. However, frequently these discussions continued to create a sense of frustration and confusion, and in some communities, polarization of views between community and government.

In 1994, the Council established a Water Management and Drainage Working Group to report to the State Minister for the Environment on best management practices, investigate Draft Wetlands Environmental Protection Policies, and deal with required changes to the drainage regulations. Later the State Minister for Primary Industry & Fisheries commissioned a Working Party on drainage, who consulted 250 farmers throughout the south-west wheatbelt. The Working Party came about due to political pressure resulting from the occurrence of illegal drainage.

Following on from policy work by the Soil and Land Conservation Council, a Memorandum of Understanding between Agriculture WA, WRC, CALM and the DEP on drainage was undertaken by the State Sustainable Rural Development Program. A small sub-committee consisting of representatives from Agriculture WA, WRC, CALM, DEP and the Western Australian Municipal Association, each briefed by their respective organisations, worked towards an agreed document outlining the required process for drainage.

Regional Scale

South-West Regional Partnership Group

The group's development of a regional strategic plan was the decision studied. The group commenced strategic planning in 1997, with the first draft released for community comment in July 1997. The draft South-West Regional Partnership Strategic Plan was finalised in 1998. The group's strategic plan integrates national and State obligations of Agriculture WA and the Sustainable Rural Development Program, including their responsibilities under the State Salinity Action Plan. The group's strategic plan pays attention to global and national trends, trends in the region, future scenarios (smart agriculture), and critical success factors. The critical success factors are the building blocks for specific strategies that set the preferred scenario of "Smart Agriculture" for sustainable rural development.

The critical success factors cover seven points: a vision of the future in the rural community; innovation on all fronts at the local level; targets and standards for sustainability; integrated planning at local and regional levels; agencies accountable to the community; agriculture as an equal party in the planning process; and marketing agriculture to the community.

Central Agricultural Regional Partnership Group

The decision studied was the group's development and implementation of a regional strategic plan. Development of the group's Sustainable Rural Development strategic plan and Business plan commenced in February 1998, and were still in draft form early in 2000, when this field work ended. The group also played an active part in the Avon Working Group's strategic planning process. This in turn informed the Group's own

strategic planning.

The draft strategic plan contains objectives and strategies that are based on an assessment of the current situation (see *Description of the Region*), and the opportunities and risks the region is likely to face in the future (see *Trends affecting the Region*). The Plan looks ahead, weighs up these pressures and possibilities, and says what needs to be done in the medium-term of five to ten years (Central Agricultural Regional Partnership Group 1998). A delay in starting the Sustainable Rural Development Program in the Central Agricultural region placed time restrictions on the group. To offset this problem, the Executive Officer employed a facilitator to assist the group in integrating existing projects. The group's vision for the program was determined through a facilitated session. The plan represented the group's vision, and a collation of program activities directed by objectives. The plan outlines the program's goals, as determined by the State Sustainable Rural Development Steering Committee, and guides the group's decision-making.

Development of the strategic plan involved a process where there was: (1) a central role for the facilitator; (2) low level of involvement of members; and (3) State government agency direction and input over the process. In the drafting stages of the plan, it was taken to the group to identify gaps and suggest new ideas, resulting in a modified draft in September 1998.

The Strategic Plan complements the plans of the Swan-Avon Integrated Catchment Management Program and the Wheatbelt Development Commission's plans for the economic and social development of the Region.

Blackwood Basin Group

The decision studied was the group's determination of the zone action plan. Discussions and focus on the use of a zone approach to land management across the river basin were initiated in November 1997, and was followed through until the formation of the first zone in the Dumbleyung area in late 1998.

The Blackwood Basin Group's "zone" approach was developed jointly by State government agencies and the Blackwood Basin Group as part of the *Blackwood Basin Securing the Future (1999-2001)* first regional initiative (Blackwood Basin Group 1999). Previous to the development of the zone action plan, the basin was defined and managed on three catchments or sub-regions (upper, middle, lower). With implementation of the "zone" management approach, the basin was defined on biophysical and social parameters, being divided into nine geographical zones of 100,000-350,000 ha, and each containing 9-15 sub-catchment groups (Figure 3.9).

During the planning stage for their second regional initiative and submission to the federal government in 1998 for funding (Natural Heritage Trust program), the Blackwood Basin Group began to identify how communication and coordination of activities between the various groups within the catchment could be improved. They were concerned that communities were undertaking work at the local level, without an understanding of the big picture. The Blackwood Basin Group was aware of the McLeod Document (Task Force for Natural Resource Management and Viability of Agriculture in Western Australia 1996), which recognised a need for community ownership of natural resource management, and their empowerment to address key issues through the delegation of real power, responsibility and accountability. The

underlying key objective of the regional strategy was greater community empowerment at local level. The federal government at this time outlined their support for innovative approaches to regional activities if strategies were cost effective over the long term and complemented by on-ground actions, with measurable outcomes and commitments through contract arrangements (Natural Heritage Trust 1998). The zone action plan was formulated from the actions of several State government agency personnel, data gathered from the Blackwood Basin Group's first regional initiative, and the support of the Blackwood Basin Group members for an innovative approach to community-led strategic planning at a manageable scale.

To date, there are four Blackwood land zones in action and at various stages of development across the basin, including: Dumbleyung, Wagin/Woodanilling, Blackwood Valley and Lower Blackwood. The Dumbleyung Zone was the first zone initiated, and it has developed a Zone Action Plan under the Blackwood Basin Group's Zone Management Strategy with targets for 2020. The Zone Action Plan contains information about the state of the zone, specific objectives and on-ground actions needed to achieve those objectives (Blackwood Basin Group 2002b).

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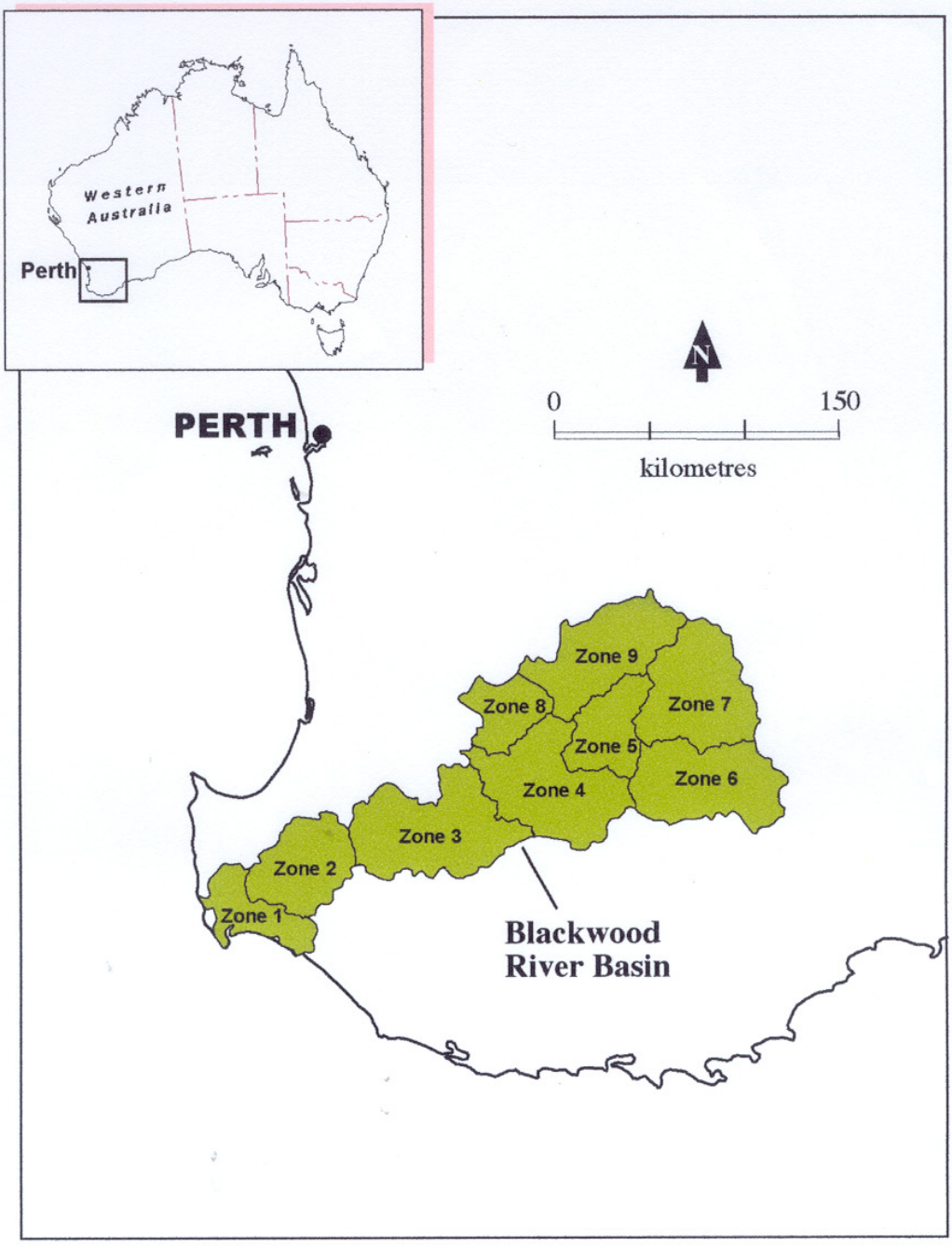

Figure 3.9 Blackwood River Basin's Nine Management Zones.

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Avon Working Group

The decision studied was the process of developing a natural resource management plan, through strategic planning by the group. Discussions and planning by the Avon Working Group for a regional natural resource management plan commenced with a first draft in July 1997, and continued until the group produced a plan for community comment in July 2000.

The history of the Avon Working Group's commencement of a regional planning process dates back to 1994, when the Soil and Land Conservation Council endorsed support for a "*process by which regional initiatives are established with real community involvement up front*" (Siewert 1994). The Soil and Land Conservation Council's involvement in regional development was due to its role as the Natural Heritage Trust State Assessment Panel. The primary reason for regional plans to be developed was to assist Regional Assessment Panels[8] to allocate Landcare funds directly to priority issues within regions. There was also concern over the federal and State government driven development of the Swan-Avon Initiative, and the need for regional communities to have ownership of future plans. The diversity between the Swan and Avon Catchments warranted separate regional plans to properly address specific natural resource management issues. Consequently, the Swan Catchment Council has also prepared their regional natural resource management plan, with assistance from the Avon Working Group. Prior to the development of the separate regional natural resource management plans, the Swan Avon Integrated Catchment Management Committee and the Swan Catchment Centre prepared a Swan-Avon regional strategy that develops partnerships with key stakeholder groups involved in the management of the catchment. The

[8] Regional Assessment Panels are committees comprised of State government agency personnel and community representatives drawn from a region, who examine funding proposals for natural resource management. These committees identify suitable applications for Natural Heritage Trust funding and pass on their recommendations to the State Assessment Panel, who makes the final decision on projects to be offered to the federal Minister for the Environment for funds.

document is called "*Working Together*", and it forms the basis of the Swan and Avon natural resource management strategies.

Land Conservation District Scale

Dumbleyung LCDC

The decision studied was the LCDC's desktop report to determine the impacts of drainage. Interest in drainage and the impacts (positive and negative) on the landscape were first publicly debated at a drainage seminar in Dumbleyung in August 1997. Following this meeting, the Dumbleyung LCDC voted to commence a project to compile a report on the impacts of deep drainage at a meeting in April 1998. This report was finalised in September 1999.

Compilation of information on deep drainage was intended for those constructing deep drainage projects (farmers and drainage contractors), and for those assessing drainage proposals (government agency and LCDC members). The decision highlighted several aspects of concern, including: the need for State government drainage reform, conflict within the group, and controversy in the community.

Conflict over the use of drainage as a Landcare tool has existed in the LCDC for several years, progressively becoming more problematic for members. The decision to undertake a desktop study was triggered by several events leading up to the decision, further exacerbating conflict between those members who either supported or opposed drainage. First, in 1997 there were incidences of some members objecting to the procedures relating to Notice of Intents, specifically those requiring members to comment and cast a vote outside of formal meetings. Members' concerns were also related to an individual member's objections to drainage not being recognised if there

was a majority vote endorsing it. Voting by majority prevented the minority objections being recognised, giving the community the perception that the whole group had been in consensus.

Second, policy officers from the DEP and Agriculture WA conducted a drainage day in Dumbleyung. The purpose of event was to discuss drainage regulations, and to give landholders the opportunity to voice their opinions. This meeting proved unsuccessful because of the lack of information on the positive and negative effects of drainage. Further conflict arose within the local community when a Notice of Intent for 32 kms of deep drainage was lodged by a local subcatchment close to two prominent reserves in the area. Drainage work to be undertaken was part of a package of Landcare activities being implemented in the subcatchment, which included contouring, fencing, upper subcatchment revegetation and water harvesting.

Conflict within the group has escalated over the past few years, with the drainage issue often debated at LCDC meetings and other community meetings in the area. A minority group of individuals within State government and the community against deep drainage have acted outside the decisions taken by the LCDC, further inflaming the conflict. Some individuals have sought to present their views at a State level, and to inform different State decision-makers of the problems of deep drainage.

In 1998, the LCDC passed the decision to seek funds for an unbiased desktop survey and investigation of the on-site and off-site effects of drainage in the Dumbleyung Lake Catchment. It would be a collation of all information on drainage, historical and current, with a local perspective. A sub-committee consisting of anti-drainage members was formed to apply for funding and oversee the project. The objective of the decision,

although never explicitly stated at meetings, was to get proper discussion on the drainage issue as a mechanism to resolving on-going conflict.

The report from the desktop survey, instead of resolving the conflict within the group and community, led instead to further conflict. Problems arose when the report was released to the general public and State government agencies prior to its presentation to the LCDC. Members viewed the report as not being a balanced study.

The Dumbleyung problems highlighted to the Minister for Primary Industry & Fisheries, and to Agriculture WA, the need to reform drainage policy. Subsequently, they have engaged with the community to work cooperatively to improve and streamline the process regarding Notice of Intents, and developed best practice water usage. Education and information policy instruments are being used to complement the current regulatory approach. Part of the new State government drainage policy makes technical information available to community on CD-ROM. The result of government policy is that drainage will be part of an overall Landcare package, and one of a suite of tools.

Goomalling LCDC

The decision under study was the LCDC's efforts to achieve a tax rebate for Landcare through federal government changes. The group took up the tax rebate issue in 1994, by seeking support from other LCDCs across the State and corresponding with federal politicians. The issue is ongoing, and the group still continues to seek a 48¢ rebate while the government has set a 34¢ return. Improving tax incentives was also an area of high priority for implementation by the State Soil and Land Conservation Council, as part of operationalising recommendations contained in the Select Committee into Land

Conservation in Western Australia (Legislative Assembly 1990).

Members of the LCDC and the wider community recognised the need to give farmers extra flexibility, and to encourage low income farmers to invest in Landcare. Individual farmers and regional organisations were aware that existing economic incentives excluded most farmers from the schemes, and wider taxation reforms were vital to achieve on-ground outcomes. The current inequity between different farmers in their ability to gain from taxation incentives needed addressing. In 1993, a LCDC member addressed the group and gained their support to initiate action to encourage implementation of new taxation incentives, such as modifying the existing Farm Management Bonds.

The group then undertook to pursue this issue. They advocated an approach that would encourage primary producers to expend funds on Landcare measures and put funds aside in profitable years to cover future expenditure. After submission to the Commonwealth Senate's Standing Committee on Rural and Regional Affairs, it was decided to purse the tax credit system. A 48¢ in the dollar tax rebate for Landcare activities would be fairer, it was argued, than increased tax deductions for Landcare expenditure which are given to low income earners. A sub-committee of members and a local accountant was formed to progress action. With the assistance of the local accountant and the Shire, the LCDC consulted the other LCDCs throughout the State through a letter, receiving 90% support from other LCDCs for their initiative. Other letters were sent to the State and federal members of Parliament. Their argument was two-fold. Firstly, tax rebates would assist people at the "coal face", who are doing Landcare activities. Second, a tax rebate was seen as a more equitable solution than Focus Catchments and Natural Heritage Trust funding, which was perceived by

members to be politically biased. The decision was directed towards improving sustainable agriculture, having widespread effect across Australia, and not just within their Shire.

Numerous politicians were contacted by the LCDC, and a variety of responses and commitments to implement actions were received. The Coalition promised that the federal coalition government would give farmers a choice between claiming accelerated deductions for Landcare works under Section 75B and 75D of the *Income Tax Assessment Act* 1936 (Cth), or a tax rebate/credit set at a marginal rate of 34¢ in the dollar for qualifying expenditures incurred from 1st July 1996. In February 1997, a year after the February 1996 elections there was an absence of any action by the government, despite the change of government. The LCDC resolved to send a letter to the Prime Minister querying his government's delay in implementing their promise. In 1998, the federal government provided a 34¢ in the dollar rebate for money spent on Landcare, limited to farmers with taxable incomes from primary production up to $20,700.

In response to the Goomalling LCDC's submissions, together with other community pressure, the federal government acted. To date, the group continues to pursue a higher level of tax rebate from the federal government. To assist the LCDC in achieving their goal of 48¢ in the dollar rebate, the Avon Working Group has added their support to the group by sending a letter to the federal Minister for Primary Industries and Energy and speaking with a State Minister.

Subcatchment Scale

Gabby Quoi Quoi Catchment Group

The decision studied was on Focus Catchment planning activities, which commenced in

July 1997, and continued over the 12 month duration of the Focus Catchment life span until July 1998. The group undertook the Focus Catchment process as a basis for developing subcatchment plans to improve the agricultural production and environmental sustainability of the catchment. It aims to fast-track Landcare activities, including implementation of solutions to land degradation, and demonstration of the group's outcomes to other landholders.

The Focus Catchment approach to farm and subcatchment planning has resulted in large part from the phasing out of extension support staff from Agriculture WA, with the resultant focusing of resources to key areas and groups. Rising saline groundwater and other land degradation hazards, have necessitated the need to protect valuable agricultural and non-agricultural land in the wheatbelt region of Western Australia. Initially, the timeframe for servicing these subcatchments and conducting the activities was envisaged to take between six and nine months. The process has been drawn out to up to 18 months. The intent of the Focus Catchment process was to develop long-term strategic management plans for groups dealing with the threat of dryland salinity. The process also includes documenting and assessing best practice farm management, introducing new technical information, and developing subcatchment and farm plans with a Catchment Support Officer and Focus Catchment team from Agriculture WA (Edkins 1998). The process requires a high level of activity, with the subcatchment group attending workshops and meetings, and being involved in planning and implementation. A condition of becoming a Focus Catchment is at least 80% commitment by farmers in the subcatchment to the process.

The outcome of the process was long-term targets for salinity management and their "best bet" options, as determined by the Focus Catchment team from Agriculture WA.

Teams consisted of a Catchment Support Officer (also referred to as a Landcare development officer), a regional agricultural economist, a hydrogeologist, a land conservation/land use planning officer, and soils and high water use specialists. Better Business, a State-wide program aimed at providing access to on-farm training, was also involved and contributed to succession planning, crop management, business planning, and conservation and management options. Management options included: use of deep rooted perennials for increased water use, increased water use by crops and pastures, surface water control, engineering options, and protection and management of remnant vegetation. An implementation framework directed actions to meet proposed targets for the subcatchment, and monitoring and evaluation of bores and remnant vegetation sites.

To enable the development of detailed cross boundary plans for individual farms, the subcatchment was divided into four smaller sub-groups. Farms were visited by the Catchment Support Officer to investigate problem sites, followed by sub-group meetings to discuss cross-farm issues. A hydrogeologist visited each farm to draw up a hydrological map.

The planning process involved developing action plans for the identified land degradation issues (Edkins 1998). Group meetings were held to identify sites, document costings and prioritise projects prior to budget allocation. Future plans were determined by the group, with Agriculture WA providing preliminary costings, and facilitation by the Alcoa representative. Drawing on previous Alcoa experience with budgeting and prioritising exercises, the group were able to make whole subcatchment decisions on group projects, ignoring farm boundaries. Farmers formed sub-groups to tackle priority areas of deep sands, perennials pastures, productive trees and shrubs, surface water management and water logging control, and piezometers. After the group did costing

and prioritising, funds obtained from State government and Alcoa World Alumina Australia were allocated across the subcatchment for: lucerne and pine trials, speciality timbers, summer crops, oil mallees, alley farming, water management, and specialty equipment.

The group completed the Focus Catchment process in July 1998, 12 months after commencement. A collation of information on farming systems, hydrology, and financial and social survey data provide the group with a benchmark for future evaluation, and background knowledge on salinity management for future reference in the form of the Gabby Quoi Quoi Focus Catchment Report (Edkins 1998). Given the existing knowledge of the group, the challenge for the Catchment Support Officer was to deliver a package that increased the group's understanding of land degradation causes, and the necessary methods to ameliorate these causes. As a result of the subcatchment group planning exercises, the report identified hot spots in the subcatchment, and specific recharge areas that had the least amount of work completed on them. Actions to address the causes of salinity require the group to rethink where they are focusing their Landcare activities, and to start working on the causes of the problem, namely recharge sites (Edkins 1998). At the completion of the Focus Catchment process the report findings assisted the group to plan strategic actions for the next two years.

Wallatin Creek Wildlife and Landcare Inc.

The decision studied was the promotion of nature conservation planning on farms and in the subcatchment. In October 1997, an ecologist from the Wildlife and Ecology Division of the Commonwealth Scientific and Industrial Research Organisation initiated discussions with the group, although there had been some involvement with the group

since 1995. The process of identifying actions for land and nature conservation on productive land ended in July 1999, with the dissemination of farm and subcatchment maps indicating areas for revegetation and nature conservation.

Discussions by the group with the Commonwealth Scientific and Industrial Research Organisation revealed they were far more concerned with salinity than wildlife. To satisfy both conservation and production goals, conservation work complemented salinity work. The nature conservation outcomes sought were increased remnant vegetation and linking priority remnants through vegetated corridors to satisfy the requirements of selected native species. The land conservation outcome sought was reduced recharge from the upper subcatchment through strategic planting of trees and maintenance of existing vegetation.

Technical advice was gained from the Commonwealth Scientific and Industrial Research Organisation's extensive ecological research in the subcatchment over the past decade, and hydrological research by Agriculture WA and the Commonwealth Scientific and Industrial Research Organisation. Initially, the group intended to utilise the software package, Land Use Planning and Information System, to develop a range of alternative strategies using different weightings for nature conservation and agricultural production actions (Lambeck 1999).

Several factors influenced landholders to become involved in the Commonwealth Scientific and Industrial Research Organisation's project. First, landholders were motivated through discovery by hydrologists of rising groundwater levels beneath and adjacent to remnant vegetation, with associated increases in salinity. Second, through increased understanding, they became aware that remnant vegetation and future planting

could offer both ecological and economic benefits. Third, they sought to improve the aesthetic appeal of the landscape and to provide future generations with a healthy environment and wildlife experiences. Finally, the group identified the economic advantages of adopting a nature conservation/wildlife image to obtain future funding, sponsorship and on-ground assistance. Early in the planning process, it became evident that Land Use Planning Information System was not suitable for generating options. It could not provide the level of detail landholders required.

The information presented in the Focus Catchment process to the group emphasised the planting of trees as a means of dealing with land degradation issues in the subcatchment, such as salinity and raising groundwater levels. The biological management options for controlling secondary salinity consisted mainly of managing and protecting remnant vegetation, and planting of perennial vegetation. Farm visits by the hydrogeologist and ecologist were conducted to inform the formation of farm and subcatchment planning.

Fence Road Catchment Group

The decision studied was on Focus Catchment planning activities. In July 1997, the farmers voted unanimously to become a Focus Catchment, becoming one of the first Focus Catchments under the State's Salinity Action Plan. The planning and associated decision-making process occurred for approximately 18 months, until the Fence Road Focus Catchment report was produced in January 1999.

The Focus Catchment process was important for the group, due to the subcatchment facing threats from dryland salinity. The purpose of the process was to develop long-term strategic management plans for the group to deal with land degradation issues. The

local farmers established targets covering management of ground and surface water, soil, pests and biodiversity. The plan produced by the process has an anticipated 20 year life span.

The process was viewed as an opportunity for all the farmers in the subcatchment to have technical advice at their disposal from Agriculture WA. The Focus Support Team included numerous experts, including: a hydrologist, high water use systems specialist, Landcare extension officer, economist, land conservation officer, and soil specialist, to assist in drawing up a plan of action for the subcatchment.

During the Focus Catchment planning process, there were numerous activities undertaken, often concurrently. The Focus Support Team attended a group meeting in February 1998, and presented farmers with an outline of the Focus Catchment process. A tour of the subcatchment familiarised the Focus Support Team with the area and the farmers. To assist in the development of best practices, a survey document of current farming practices was distributed to group members. Hydrogeological investigations involving individual farms were done to gain an understanding of the subcatchment's hydrogeology, showing farmers the imperative to work together across farm boundaries. Over three workshops, farm plans were developed and reviewed through mapping and soils days, leading to the development of a subcatchment plan. Farm visits allowed discussion of land degradation problems, and management options by individual farmers and the Focus Support Team. The outcome was a subcatchment map and Fence Road Focus Catchment Action Plan document, addressing the major land degradation issues (Agriculture WA 1999a). The Action Plan incorporated an economic analysis using the technical information gathered from the subcatchment, to provide a situation statement, best bet management options, implementation, and a monitoring kit.

Problems arose at the start of the Focus Catchment process. At the beginning, Agriculture WA wanted the farmers to sign an agreement committing them to implement the Focus Catchment recommendations if funding was available. No such agreement was signed, as the State agency could not meet the group's requirement that their recommendations would solve the land degradation problems.

During the process, group members held a meeting to discuss their concerns and problems. The Chairperson and subcatchment coordinator presented the members' issues at a meeting with the Agriculture WA regional manager, and members of the Focus Support Team. After this discussion, the Focus Support Team modified their approach to the group and relations improved. Further problems arose from numerous delays in delivery of the Action Plan to the group. No goal or target setting exercise was instigated at the commencement of the process. The Focus Support Team with the subcatchment coordinator and Chairperson set goals at the end of the process. The group received their Action Plan Report in August 1999, and have found it to be a very useful document, even though there were no new solutions to the subcatchment problems.

3.4 Understanding the Contexts and Challenges at the Four Spatial Scales

This section discusses the functioning and capabilities of the groups studied at the different scales. At State scale the statutory group has prescribed areas and methods of operation within the legislation. However, in practice the legislation acts to direct group activities and restrict their functioning simultaneously. The functioning of State scale has changed with the shift to regional organising and delivery, and the recognised

benefits associated with regional structures and processes to link planning with implementation. While many roles have been devolved to the regional scale, the State group provides a platform for a whole-of-government and community approach to natural resource management policy development. The group's reliance on Agriculture WA for administrative support, combined with its advisory role to the Minister, are real constraints at this scale.

The main functioning of regional groups is that of directing and coordinating activities and resources to priority areas through strategic planning and management. The challenge for regional groups is the translation of state policies for local implementation. Regional organising provides the opportunity for information sharing between government and community and networking opportunities for policy-makers by "bringing together the planners and implementers" (Jennings & Moore 2000, pg. 187). However, both government- and community-led groups lack the resources, authority and institutional arrangements to function as another tier of governance. The capabilities of these groups and others at regional scale and below to carry out long term implementation is severely restricted because of the short-term funding available and on-going reliance on externally-provided, uncertain resources, such as the Natural Heritage Trust money from the Federal government or State government agency funds for Ministerial directives.

Groups at the smaller scales of LCD and subcatchment function specifically at local level to coordinate and achieve sustainable on-ground actions through the implementation of farm and subcatchment plans. The withdrawal of extension services by the State government and formation of Focus Catchments has meant that only some groups have been provided with technical expertise to progress local level planning and

decision-making. State government assistance through these programmes are limited to short periods of time and offer no funds to cover implementation costs.

From the late 1980s there has been a large number of LCDCs and subcatchment groups established and supported by State government, followed by project funding through the National Landcare Program and Natural Heritage Trust. These groups now receive little support and only limited technical advice on managing natural resources and environmental problems. The operating environment for LCDCs and subcatchment groups has declined with the withdrawal of government support and involvement, and shift of service delivery to regional scale. In its place is the expectation that community will take ownership of environmental problems and implement the appropriate sustainable land management practices. Unlike groups at larger scales (State, regional), these groups do not receive the benefits of professional services, such as facilitation, to assist in strategic planning and group development.

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CHAPTER 4.

ROLES AND REPRESENTATION

4.1 Introduction

Social sustainability requires effective representation. Such representation can be described as "empower[ing] stakeholder participation, while providing an accountable balance between equity and efficiency" (Smith et al. 1997, p. 142). The key is finding a balance between inclusiveness, fair representation, and efficiency (namely competence and capability). Along with efficiency, effective representation of interests must be such that participants are empowered, committed, and maintain communication with constituents (Williams et al. 1998).

The extent of public participation in environmental decision-making is predominantly based on interest, geography, or some other defining feature such as the production sector, government or industry. Such representation defines who participates and has a voice in decision-making. It frequently occurs through membership in voluntary groups, and it allows for the identification and incorporation of affected interests in decision-making (Smith et al. 1997). This active participation increases individuals' ability to lobby and exert influence in the formulation of policy and/or its implementation. Crowfoot and Wondolleck (1990, p. 175) describe representation with dual functions; citizens devoting their "energies not only to participating in the actual problem-solving sessions, but also within their own organisations to maintain group cohesiveness and support for negotiated agreements".

Natural resource management representatives are generally drawn from interest groups, and in some cases are landowners (e.g. at subcatchment level). In general, this means natural resource management groups represent only landowners and interest groups, and not the general population. Often such groups predominantly consist of rural participants, which raise concerns regarding perceived fairness. An ideal conception of representation is that representatives have civic virtues and they represent the whole of public interest, which means the balanced concerns, values, beliefs and preferences of the community (Rippe & Schaber 1999).

To move towards more democratic and participatory processes, procedural fairness in natural resource decision-making calls for such principles as the suppression of self-interest, the representation of all participants' issues, and those of the broader communities (Leventhal et al. 1980). As applied to natural resource decision-making, issues of fairness in terms of procedural and distributive fairness, warrant consideration of representation in public participation (Smith & McDonough 2001). Rawl's (1972) theory of justice argument for equality of opportunity for advancement and equality in basic liberties, means providing for equal opportunity for all individuals to participate in and represent one's interests.

The essence of the "idea of fairness requires that all individuals have the possibility to articulate in public their concerns and preferences with respect to the different possible options" (Rippe & Schaber 1999, p. 76)[1]. Fairness in representation is guaranteed by distributing voting power and representation as equally as possible at the different scales, and a neutral position ensures that these community-wide interests will prevail (Press 1995).

[1] Renn and Webler (1992) view fairness as ensuring all citizens have an opportunity to participate in their own governing. Emphasis is on citizen involvement in the earlier stages of decision-making, before proposals have been developed by experts (e.g. scientists) and bureaucrats.

This chapter briefly introduces representation as a key element of social sustainability. This is followed by an examination of democratic representation and diversity as key features of representation, and a description of the types of representation from the perspectives of the participants in this study. The next and most substantial part of the chapter examines the actual and desired attributes of the roles of the natural resource management groups. The examination relies extensively on quotes from interviews. Given that spatial scale is a fundamental consideration of this study, this chapter devotes considerable energy to comparing and contrasting features of representation at different scales.

4.2 Democratic Representation and Diversity

In comments about representation, respondents often spoke about representation in terms of democracy. One of the democratic ideals mentioned, particularly at a regional scale, was having diversity properly represented. Of potential concern in this study is only interviewing and reflecting the views of those already "represented". Such an approach is defensible, however, given this study's focus on specific groups, their decisions and those directly involved.

In the natural resource management groups studied, the status of individual members was defined by who they represented.

> You make a decision on your best knowledge, and you don't consult everyone in the community when you do … that is what you were appointed to do. [community member – State]

> Well, you have to look at what are you representing. Are you representing groups of people, or are you representing issues? What are you actually representing? [support person[2] - regional]
>
> Becoming more represented … we wanted to have more representation from the landholders, the people that really matter. [community member – LCD]
>
> Mostly get 80 to 90% turnout … you have got the high flyers, the big farmers, and the smaller farmers. [community member – subcatchment]

As illustrated by the above quotes, the form of representation changed across the different scales from representative to participatory. At the larger State scale, representatives acknowledged the lack of comprehensive consultation with all constituents, and the dilemma of constructing a representative structure to reflect all interests. Respondents' quotes at smaller scales (e.g. LCD, subcatchment) show a more participatory approach by having more people participating directly in decision-making.

Democratic representation

Respondents frequently identified democratic representation from three perspectives. Firstly, respondents evaluated representation based on inclusiveness. Secondly, the "representativeness" of the natural resource management group relative to the broader community was a cited concern. A third dimension of democratic representation was the fair selection of representatives. These perspectives focused on the "process" of representation, and excluded assessing acceptance of the "outcome" of decision-making.

It is possible to address concerns regarding representational elitism by discovering who is excluded from natural resource management groups (Gray 1992). The perspective of *who* has power in groups, and not just *what* power groups have, needs to be considered. Elitism concerns were voiced for reputation-based representation, where influential individuals

[2] Support persons were individuals working often in administrative or facilitation roles assisting members in group organising and decision-making. They were Executive Officers or Project Managers, and either government agency persons or community citizens employed through government funding.

acted as representatives in multiple decision-making forums. This representation created stable interlocked networks across scales, but at the cost of diversity. As Gray et al. (2002) point out, elitism in groups can be limited by more inclusive participation. The adoption of consultative, communicative, and participatory roles by representatives, can overcome criticism of "elite environmentalism" (Overdevest 2000).

Democratic efforts seek to extending public participation from "elites", including community leaders and organised groups, by reaching out to all sections of the community. The difficulty is "above the small-group or community level, systems of representative democracy have to reconcile many complex and conflicting pressures" (Sharp 1995, p. 326).

Community leaders, tend to be drawn from an elite group of individuals (Gray et al. 2002). Gray et al. (2002, p.4) states, "leadership can also be interpreted as elitism, which is at best anti-collective". What needs to be determined is what current "leadership" programs are building – leadership or elitism?

Inclusiveness. Inclusiveness refers to the presence of all citizens who might be affected or have an interest in the decision. It focuses particularly on the inclusion of minority groups and having all specific interests represented. It seeks to ensure there is no technical or class bias. As such, it differs from the issue of the number of citizens present. A large number of actors may represent the same sectoral interests.

At all scales, representation was generally about having all interests represented around the decision-making table. An exception was the regional partnership groups. These government-led regional groups sought representation to deliver successful outcomes

through competency and expertise, and were not driven by the need to be "inclusive". The focus of these groups was on the success of decisions in meeting desired objectives. Respondents questioned not who was represented, but rather whether policies, projects, or on-ground activities adequately address the needs of communities. Representatives sought to adequately address the interests and views of community, producing outcomes that met predetermined goals to deliver sustainable futures.

> [Do the regional partnership group represent the community?] That is an interesting issue. A lot of people would have concerns over that, but personally … I believe they have hit the mark in terms of projects. And when we talk about representing, I am describing in terms of "have they hit the mark with that strategy and what the community is on about". I am reasonably confident about that, and I base that on when we have gone to these meetings around and invited the community or key stakeholders. [government person - regional]

Representation was not fully inclusive, as Indigenous people were not included in any of the groups studied. Absent as well was any socio-economic, educational, or cultural representation of Indigenous persons. Of particular concern for democratic representation is the lack of inclusion of Indigenous Australians; the traditional owners[3] of the geographical areas covered. At the LCD, regional and State scales, Indigenous representation is not legislated under the *Soil and Land Conservation Act* 1945 (WA), nor recognised in the groups' respective constitutions. Representation at subcatchment scale reflected only European land ownership, and did not recognise Indigenous land rights or value Indigenous natural resource knowledge. Indigenous peoples' marginal role in land ownership is a symptom best described as the "denial of legitimacy of Indigenous interests" over resources (Lane 2002, p. 829). Other deficiencies in representation identified by respondents were:

> As it says in our mission statement that we are about education and coordination, I always thought we should have had a person from the education department sitting on the group. [support person - regional]

[3] Native Title refers to the rights and interests of Aboriginal and Torres Strait Islander people in land and water according to the traditional laws and customs. The rights given under Native Title can vary from a limited right to access important places to a right to possess, occupy and use lands (Commonwealth of Australia 2000).

> Things like raw materials or minerals are natural resources, but there's no representative of that aspect at all. No Aboriginal representative, so … you can go through and list a whole series of important stakeholders that aren't on that [group]. [government member – regional]
>
> … each [sub]catchment group talks about what each [sub]catchment is doing. Town people are not really involved. [community member – LCD]

Some group members identified the absence of women from the groups as a deficiency.

> [We] need to balance the gender proportion. Women are the main "whip crackers" and "motivators". [community member – LCD]
>
> In the nine years of the LCDC, [XX] has been the only woman. [community member – LCD]
>
> … not as much interest [by women].You go to the [sub]catchment groups and its basically the blokes that go along. I suppose they're basically the ones that have been doing the farming, and that especially in today's climate where a lot of our women sort of go to working off farms. They really haven't got the time. But you know, it's great to see women on the committee giving a different dimension to it. [community member - subcatchment]

Representativeness. Representativeness is how well individuals reflect their constituents, community or geographical area from which they are drawn. It is also related to the balance of interests within each group, and specifically the number of citizens representing specific interests. For example, the number of primary producer representatives versus the number of conservation representatives was a concern. The Soil and Land Conservation Council and the Blackwood Basin Group each had one conservation representative, but numerous primary producer representatives.

The word "community" is highly problematic (c.f. Ife 1995) given the many definitions that have been posed. Communities can be defined by geographical boundaries. Some communities are not geographically bounded, but rather tied together based on common culture, religious affiliations or leisure interests. These functional communities are based on some binding common element that creates a sense of identity for individuals (Ife 1995).

The use of the term "community member" is similarly problematic given these members are not truly representative of the broad societal community (Ife 1995). Community members are those individuals representing the interests of natural resource management citizens often within rural communities. These rural communities are clearly bounded, socially homogenous and based on shared norms (Virtanen 2001). The use of the descriptor "community member" is used explicitly in this study to refer to an individual's association with a natural resource management community, generally located in a particular rural area.

Representation at larger scales included people who spoke directly for a specific group of constituents. These individuals represented a defined interest group, government agency, or geographical community, and brought their collective views to the decision-making table to protect their interests. However, there was the recognition by most members that a collective interest was best served in achieving outcomes, and although self-interest was present it generally did not dictate actions.

> Maybe I'm too agency minded, or too agency driven. I don't think I am. I try to take a view that I think what's best for everyone, not just best for [XX government agency]. [government member – regional]

At State and regional scales, a large geographical area and dispersed constituent base meant representatives were often not truly "representing" all concerns. They were not consulting with constituents over issues and bringing those views to inform decision-making. This limitation of representative public participation can only be feasibly overcome at local scales using direct representation.

> In terms of representative of the community - I don't know how you really do that so well when you have only twelve people. When you are looking at 120,000 people. So I don't know how well you can do that, so I am not worried at them from that point of view. What I am pleased [at] is the diversity of interests, and that they are good critical thinkers. So, I am comfortable with them. Some of them do have their own agendas, but they leave them at home … people may say, "Who are they?" "They're not representative of the

> community, we are." But I would say, "you only say you are representative because you say you are, that is the only reason you are representative." [government person – regional]
>
> … small number of people in a big area, creates problem [sic] of representation. [external person]

There were some deficiencies in terms of how well individuals represented their constituents, communities or geographical area. A requisite level of activity needs to occur to achieve representativeness. Numerous respondents identified that members failed to take an active role in disseminating information to the groups they represented at the LCD, regional, State scales and the wider community. There were concerns raised over the lack of action, and poor reporting back by community representatives.

> I think we still have a bit of work ahead of us as far as representation goes. Certainly when we have been to some of the LCDCs, and they are still asking who the Avon Working Group is. [government person - regional]
>
> Going out and talking to community landcare coordinators, in that, I was just going out to talk about natural resource management strategy. And I found myself talking about so many issues involving the Avon Working Group, and really having to back them up. I thought that in four years the Avon Working Group were known in the region. In actual fact, they're not … most of them I knew had no idea who these people represented. [government person – regional]
>
> I don't have a great deal of confidence that in many cases, that those representatives are in fact working through those issues with their constituent bodies … I suspect while people have affiliations with various community, industry, agency groups, I suspect that there's a strong degree of self in that, and personal views as opposed to ... I'm telling you here is the views of x, y, z organisations, my view might be this. But I have to tell you this, I don't recall lots of that sort of conversations. [government person - regional]
>
> … too much weight placed on the LCDC … as a group of people, I think they're expected a lot of … the expectations that their views represent the community is like the assumption that land conservation, farmer issue and that they [have] consulted widely with their catchment. I mean that's not the case, generally. [community member - LCD]

Generally, at higher scales of organising it was accepted that representatives acted as spokespersons, and had internalised their respective organisations' views. Spokespersons from each organisation represent the organisation, and there was no perceived need to consult with all members of a parent organisation. This refers to the notion of transforming interests (Callon & Law 1982), where participants' values and actions are transformed in

line with their representative groups. In provisionally "enrolling" participants to undertake actions through a group process, the interests of participants are identified, attracted and transformed. Participants define their position in relation to other members.

Selection of Representatives. Use of representative public participation based on the model of representative democracy was seen as legitimate and acceptable, given it is the foundation of the Australian political system.

> There is also criticism that some of these groups are not representative … I don't know that I could put my hand over my heart and say that everything I've done has been representative. You make a decision on your best knowledge of what's around you. And you don't consult everyone in the community when you do it, and in most cases that's why you were elected or appointed to do it. So while every organisation should try hard to communicate, I don't accept the criticism that gets ditched around from time to time that we're acting without the knowledge of the community, or that we're setting up these structures that are not representative and so on. I just can't wear that - because the same model runs right up to the Prime Minister. There comes a point when you have to make a decision, and that's why you're there. And you do it with the best knowledge you've got. [community member - State]

> Every time they get pushed into a position when they have to make a hard decision you get them saying, "Oh I've got to go back and talk to the people I represent". You don't get Shire councillors saying that. You don't get politicians saying that. They've got to make the decisions. They were put there to make decision. People nominated them to be in that position, and therefore they're representing someone or some group of people, and they should report back to them. Well, they don't generally. That's one of the other problems with it. [government member – regional]

Many members viewed representation to be democratic when attained by democratically electing members in an open process. Generally, group members viewed the notions of democracy and representation as the same. The expected role of elected representatives was relaying information, so the "voice" of the representative reflected the needs and desires of an informed constituency.

> What is true democracy? … [this] is not true representation, as there is no feedback [to and from community], and what is taken back to the community is their interpretation – Chinese whispers. [external person - regional]

> … [it is] clear that we don't have personal agendas, community based … [it is a] democratically elected body open to everyone – industry, farmer groups, agency. [community member – regional]

At the regional scale, the community-led groups were supporting the move towards members being voted on as representatives of the community. This new method would require individuals to justify their competency, and would provide accountability through true democratic processes. Concerns over existing appointments at regional and LCD scales were related to perceptions of undemocratic membership processes. For example, it was possible for individuals to nominate and gain appointment to a LCDC through their subcatchment group. In contrast, local government representatives were democratically elected.

> I know when I was involved with the local council Shire the feeling that came through was … some of those members were not properly democratically appointed. Some of them were self-appointed. [community member – LCD]

Credibility and legitimacy of representatives was a central concern at the LCD scale. This highlights the importance of the procedural aspect of securing membership, and in particular satisfying citizens' perceptions of democracy. Voting to elect representatives on LCDCs may be associated with the election process of local government, LCD boundaries, and the formalised nature of LCDCs as statutory bodies. In local government systems, councillors are democratically elected and accountable to constituents. This role of local democratic accountability is unmatched by other local groups with a role in natural resource management.

While the use of community elected representatives overcomes some of the concerns of undemocratic decision-making, it is not an assurance that social justice, representation of community interests in decision-making, and competent representation will result. Community elected representatives were elected by their local or sub-region natural

resource management community, but not the whole community. Current election processes for group members were viewed by many as inadequate at regional and LCD scales. Some of the concerns highlighted by members' during interviews are given below.

> The reason why politicians do that is because they can then say that they've progressed to the next step. I don't necessarily agree that what we're doing is the correct way … [in] Landcare, we do need the opportunity to be able to go and target specific people who we feel will have major contributions to make to the groups. And just through having elections, nominations through the LCDC, I feel it's not getting the right sort of people onto the committee. [community member – regional]

> [The] majority of the people that are on that committee are very good people. They are committed to representing the community on the LCDC, and do so to the best of their ability. Some of those, you could say, you wouldn't describe as competent people, but they are genuine people who are doing their very best. [community member – LCDC]

Diverse representative base

Communities are not single homogenous entities. Representation must consequently reflect the heterogeneity of these communities. This is an ideal. In reality, the majority representation on natural resource management groups consisted of citizens engaged in primary production and land management practices. To meet representative democracy ideals, representation requires participation that includes participants with a broad range of interests and backgrounds (Blahna & Yonts-Shepard, 1989). Membership diversity was only mentioned at regional scale, and it was a group characteristic most members identified as a positive.

> [The] strengths were its diversity of membership, - people from the land, farmers, balance of agency and government people, consultants and people of a wide experience. Strengths were, at the time I was with it, its membership was very balanced. Its weaknesses? Well, it was always difficult to penetrate business and government organisations that influence the work that you are doing, if you don't actually have representatives from those agencies. [community member - regional]

Only a few members interpreted a diverse representative base as a weakness. In this view, the diversity may have implications for group efficiency as a result of increased

heterogeneity of the group's composition, and the difficulty of attaining agreement on common issues.

> … [regarding] the diversity of membership, one group of people say that diversity of membership is a great strength, but in other ways it holds you back. If I was a member of an organization, and we all had a single mission and the same vested interests, you would certainly make a lot more progress than you would when you pulled in together people with a diversity of interests. As I said, that can also be an advantage because you can learn from them as well. [community member - regional]

Alternatively, the fear of "group think" resulting from drawing on representatives from similar interests or backgrounds was a concern for a few members. At the regional scale most members supported representation that was competent and diverse in nature, but functional to achieve good decision outcomes through mutual respect and open expression of views.

> It was actually a reasonably good mix of people … but, what you do need to have: enough of diversity of people that they're all forward enough to speak and come out. Which is most of the people, as you don't want to get into a "group think" situation, which I think is one of the real recent trends that happened on some other bodies … I think the strength is the diversity of the group. Another strength being the level of at least mutual respect for people, even though you come from completely different perspectives from them. [community member – regional]

While representation of the diversity of interests within a region by skilled practitioners served the needs of the government-led regional groups, the accepted "norm" for community-led regional group membership (e.g. Blackwood Basin Group and Avon Working Group) was representation through spokespersons for specific interests, geographical areas, and communities. Members were purporting to be acting in the community's interests. For example, the membership focus of both the Blackwood Basin Group and Avon Working Group was on the "*need to ensure the person is representative of the community*" [community member]. This contrasted with the regional partnership groups' perspective on representation: recognising the inability of an individual to be truly

representative of their community, but with sufficient competence (skills, knowledge and experience) to produce acceptable outcomes.

Diversity was not an issue at other scales, either due to the membership being statutory based (State and LCD), or based on geographical representation. Diversity in representation at State scale was directed by the need to include the primary production sector, State regulatory agencies, the peak local government body, and conservation spokesperson in a way that would allow informed policies to be developed. The diversity at the LCD scale was often a result of the diversity of interests within the local communities. Membership at the subcatchment scale reflected the diversity of farming enterprises within geographical communities. It includes landholders using alternative farming practices, marginal farmers, and a diversity of individuals from "*the high fliers, the big farmers and the smaller farmers*" [landholder].

4.3 Types of Representation (Role-Taking)

Members of groups "took" a range of representative roles, here described as "types". These types were determined by the basis on which members were selected, and the goals, functions and dynamics of the group of which they were part. As described in detail in the following sections the five main types, described in detail in the following section, are: self-interest, sectoral, geographic, politically-based, and competency-based representation (Table 4.1).

Table 4.1 Types of Representation (Role-Taking).

Group Name	Type of Representation				
	Self-interest	**Sectoral**	**Geographic**	**Politically - based**	**Competency - based**
SLCC	- -	YES rangelands, conservation, agriculture	- -	YES local & State govt	YES
SW RPG	- -	YES	- -	YES local govt	YES
CA RPG	- -	YES	- -	- -	YES
BBG	YES personal agendas	YES govt agencies, industry	YES sub-region & & LCD based	YES local govt	- -
AWG	YES personal agendas	YES govt agencies, education	YES sub-region based	- -	YES
Dumbleyung LCDC	YES personal agendas	YES	YES sub catchment based	YES local govt	- -
Goomalling LCDC	YES personal agendas	YES	YES Sub catchment based	YES local govt	- -
FRC	YES	- -	- -	- -	- -
WWL	YES	- -	- -	- -	- -
GQQ	YES	- -	- -	- -	- -

Note: YES – denotes the presence of a particular type of representation in the case study group.

Self- interest representation

Self-interest driven representation aimed to protect individuals' vested interests and/or economic investments in their own properties or business. Individuals worked to progress personal agendas at the expense of the collective good of the group. Individuals sought to advance their own agendas predominately by seeking to maintain the status quo, resisting

change, diluting the "radical nature of the debate", gaining individual advancement and unequal advantage. Self-interest is a concern in any decision forum (Scott 1998).

The desire to learn, be a part of the action, and to have some control over future directions were positive self-interest motivators group members gave for participating in decision-making. Positive outcomes of self-interest at the smaller scales of subcatchment and LCD developed further commitment to participate in groups and decisions.

> … ownership … that's what gives most people their motivation [community member – subcatchment]

From a positive perspective, self-interest was a strong driver for obtaining individuals' participation in natural resource decision-making, and it also led to individuals committing themselves. Chavis and Wandersman (1990) found participation itself acts to further enhance an individual's sense of community, which in turn leads to greater participation. Such commitment arising from self-interest can provide consistency in membership, and from a pragmatic view, it is a necessity for participation (Curtis et al. 1999).

> Well, they all come with their agendas, their personal agendas, which is a huge problem. More than their representative agendas … these people come along, they are basically there to represent themselves, and what they think on the day … there is some common purpose there, strange as it is, despite their personal agenda and who they do or don't represent … In a sense, I think having a personal agenda, it almost gives them that commitment, as it is happening to them … by having it affecting them personally, they might be in a better position [for] what might possibly happen to improve it by group effort. [support person - regional]

Negative outcomes of self-interest involved representatives using groups to progress personal agendas, disrupting or dominating meetings, and holding entrenched positions. The outcome often culminated in conflict between individuals. While the pursuit of self-interest did not always cause conflict, its presence did pose the potential for more subtle

detrimental effects on group functioning. Such effects acted against the "attractiveness" of participating in group activities.

> [Conflict] has bogged down the group, and it's bogged down the group to the point where there's probably members that don't make a concerted effort to come to every meeting. [community landcare coordinator - LCD]
>
> People like XX was [sic] a bit more vocal, and a small landholder … since he's left, they're not so caught up in the issues that were XX's priorities. [community member – LCD]
>
> Originally, when it was first formed, it was meant to be representative of local government, organisation's representatives, community, somebody with a biodiversity slant, and in a way those members are still there. But they seem to have lost who they are representing and pushing their own agenda … so really, I often wonder whether they have got their organisations in mind. [community member – LCD]
>
> I think we all had our own agendas, but I think people don't push them that hard that they overshadow everything else … some seemed to have their own ideas, and some seemed to be representing the ideas of the groups or the industry that they came from … like XX spoke generally about what local government thought. It wasn't XX pushing a barrow. [community member – State]

The motivating factor for people joining groups was to achieve goals (Roberts 2000). Analysis of the interviews found participation was primarily driven by an individual's self-interest and often for personal benefit. Individuals' actions were selectively self-oriented, with recognition of the larger community of which they were part. As contended by Adam Smith from the book, "*The Wealth of Nations*", and cited by Maser et al. (1998, p. 96), it is the "invisible hand" perspective, of "everyone, acting narrowly and competitively in pursuit of their own self-interests, does what is best for society at large as if guided by an invisible hand."

Respondents gave a range of reasons for becoming involved in natural resource management groups. Questioning of group members revealed several dimensions: personal self-interest based on perceived gain, a general interest in Landcare/land management, a forum for learning and social interaction, access to and influence over funding or technical information, and concern for a problem (e.g. biodiversity). There was also an expressed

obligation to represent community interests, preserve the environment for future generations, and to "give back" to the community. Most of the group members interviewed had this sense of civic responsibility, and undertook participation as voluntary community service.

> … my personal reasons [for participation]: interest in Landcare, and particularly because we have got a salinity problem on our property. So I thought if I got involved I would start understanding salinity and what we can do about it … Also, I thought we live in a catchment, so it is important to start working together at the catchment to combat land degradation … and also for funding avenues. [community member – LCD]
>
> Well, mainly to exchange ideas, and find out problems with other people they're experiencing in trying to be a sustainable farmer, really. [community member – subcatchment]
>
> The most important reason at the time was the XX LCDC had missed out on funding … [I] thought, well, I'd better put up or shut up … I nominated, and I was elected. [community member – regional]
>
> … voice for my particular area, and one of the main reasons was to ensure biodiversity issues addressed. I joined as I was concerned with natural diversity and where it was going. [community member - regional]
>
> It is a community obligation in one part; a desire to improve the environment for ourselves and future generations. [community member –LCD]
>
> … a mixture of personal [sic] in putting something back into the community that we gain an income from … certainly important, I think, to be seen for our business to be contributing … able to reflect some of our clients' views back into that group, and to have some feedback into Agriculture WA. [community member – regional]
>
> What did I join for – probably to try and get that balance - maybe for personal reasons. I thought that the community was being misrepresented. [community member – LCD]
>
> I had always been interested in environmental sustainability on the farm … I thought, well, this is something I want to know more about. It's something that is pertinent to us on the farm. It's something that helped me get into the community … I joined a group because I think I have something to contribute. [community member – regional]

Self-interest was frequently intermingled with other motives. Motivation for participating was generally attributed to two or more factors. Self-interest was rarely the single driving force, but was often coupled with sharing responsibility, "giving back" something to the community, and contributing to sustaining the resource for future generations. A variety of motivating factors for participating were expressed, each with an element of self-interest.

> Some are there for the dollars, others are there as they have a thirst for knowledge and to fix the problems. [government member – subcatchment]
>
> It was a means of broadening networks and maintaining some contact with rural areas, where I had previously done work, but which I was not working at the time. So a variety of personal, professional, and business reasons. [community member – regional]
>
> It was a great opportunity to understand more about agriculture and horticulture. And in any business I've been involved in [I] always believed in giving something back. So, yes, there's that vested interest in the networking and exposing me to more about agriculture …I choose to reinvest something back into community work. [community member – regional]
>
> The motivation, I think, stems from persona. There's a little bit of personal - there are self-interests. Self-interests have been a bit of a driving force … to further where that self-interest, and a little bit of community interest. Maybe looking at the future of farming in [the area]. [community landcare coordinator – LCD]

While many motives were self-interested, other motivations were altruistic. Otherwise categorized as "we-feeling", "conscience", "empathy" and "morality", they are linked to commitment to a course of action necessitating cooperation (Mansbridge 1992). Most respondents interviewed at subcatchment and LCD scales spoke of the value of participating from a perspective of personal gain. These groups generally consisted of "a collection of individuals who are trying to satisfy a personal need through their association with a group" (Roberts 2000, p. 237).

> Because I was in the center of the catchment, I needed to have everybody in the catchment working in a coordinated system. [community member - subcatchment]
>
> Catchment groups allow issues raised amongst [a] forum of neighbours. Still [the] view is "what can I do on my farm", "what can I put into catchment group to get something out" … [the] motivating factor is self-interest. [community landcare coordinator]

The study did not investigate the link between individuals' comments and family succession in their farming family. However, self-interest to provide a duty of care to their children's future farming prospects was advanced.

> It's just that in-built concern that they've [farmers] got for their land - not their asset - for their environment. [community member – State]

> … social thing, get to know the neighbours well and working together. I want to make a different and need to do things for future generations … leave a legacy, leave a positive legacy. [community member – subcatchment]

The State scale was unique, with no overt expression of self-interest by the community or government agency members. A level of trust and cooperation between group members meant activities were directed towards the collective good.

> I think we also know each other now, so we don't push too hard a line …an understanding of where the boundaries of what is and isn't acceptable. [community member – State]
>
> I think there's less position taking these days, in terms of "well this is my position - that's your positions". I think there's less of that these days … no [the core membership hasn't changed], not for some time. So, I think there is less position taking, definitely. [community member – State]
>
> … two way thing. You're supposed to be informing the organisations and the community as well. And if they're just going in and saying this is our line, then they're not helping on policy generation. It's there for just getting what they want. Whereas other organisations, certainly XX, when we participate in things, we try to be influencing good policy outcomes. And the way we participate is we have policies, and we try to push those … If you're a committee, it goes that you are there for negotiation and discussion. There's no point setting up a committee … If you are just going to push your party line, because everyone's going around the table doing the same thing. You don't get anywhere. [community member - State]

Self-interest was evident at all other scales, appearing strongest at the smaller scales. At regional scale, it appeared to be a strong motivating factor for many group members, particularly in the community-led groups. Reasons for pursuing personal agendas included members continuing to strongly identify with their local areas, even when operating at the broader strategic decision-making level.

> I guess the Avon Working Group's an extension of all the interests I've got locally … I think it's well to keep my area up with what's going on in Landcare, and to push the good work that is going on in my area is probably one of the main things. I'm always on the look out for things that I can take back and introduce into my area, or if there's an opportunity to grab some money or something like that in my area. [community member – regional]

At regional scale, the partnership group members were focused on using their expertise and local knowledge for the collective good of all industries and communities in the

region, and this diminished the expression of self-interest by individuals. In contrast to the regional partnership groups, a common criticism of the Blackwood Basin Group's representation was the inclusion of self-interest and protection of geographical area interests.

> I don't think it's necessarily a problem with the core people staying on it [BBG]. That can be a bit of a strength. The thing I find, though, is that those core members are still talking about their particular individual things, and they haven't developed an organism that's the sum of those personalities, and now work hand in pocket well with each other. It's still a case of the greenie talking about his greenie stuff, this person talking about the lower catchment and that, that and the other thing. So, in that respect they haven't grown. They've grown as individuals, but not as a group. I find despite the fact that, that core group have stayed there. [government person - regional]

A feature evident at LCD scale was the presence of individuals with their own personal agendas, which was detrimental to the committee's functioning. Self-interest was a component of the conflict that arose within the Dumbleyung LCDC over drainage. The tax rebate decision under study in the Goomalling LCDC also had implications for local landholders.

> People like XX were a bit more vocal - a small landholder … Since he's left, they're not so caught up in the issues that were XX's priorities. [community member – LCD]
>
> Representative of local government funds, organisation's representatives, community, somebody with a biodiversity slant, and in a way those members are still there. But they seem to have lost who they are representing, and [are] pushing their own agenda. Probably, because some members have been there too long … so, really, I often wonder whether they have got their organisation in mind. [community member – LCD]
>
> Well, the opponents of this drainage application, in my view, "you don't represent the majority of the community". I think it is more of self-interest. [community member – LCD]
>
> There are a couple of individuals who tend to use the group to fire off salvos on their own. And I think that's a little bit ordinary at times. And, so, they're part of the group, but they make their own decisions and go their own way. And that does cause tension, and it's not good. [community member – LCD]

Representation at subcatchment scale reflected individuals' commitment to addressing land degradation at a local level. The majority of landholders were represented on Landcare

groups at subcatchment scale, with up to 80-90% participation rates. Absentee owners and leasees of land appeared to be the only non-participating landholders in most subcatchments. However, the group often took measures to keep them informed of activities being undertaken.

Sectoral representation

Sectoral representation pertained to representing the interests of a specific sector (e.g., community, government, industry etc.). This type of representation involved local and State government agencies charged with the responsibility of protecting and managing the environment and natural resources, and the production sectors involved in resource extraction or use (forestry, dairy, grazing, pastoralists etc.) These groups and organisations represented specific sectoral interests, community aspirations, or acted to protect and manage public resources. Sectoral and interest representation are treated here as synonymous.

Individuals from formal organisations including the government, industry, community, and environmental groups spoke for a particular interest area (e.g., agriculture, forestry, local government, conservation). Individual members were regarded as official representatives of organisations, such as the Pastoralist and Graziers Association and local government. The natural resource management groups, where group members were representing sectoral representatives, are shown in Table 4.1.

The decision on which sectors are to be represented is frequently made by those individuals initiating the formation of non-statutory natural resource management groups. For the community-led regional and subcatchment groups, such representation is formalised in the group's constitution. For statutory natural resource management groups,

such as the Soil and Land Conservation Council and LCDCs, the membership is prescribed in the legislation. Generally, the sectors chosen to be represented are those who have an interest in or can block decision-making (Moore et al. 2001).

The responsibility of individual members from these interest or sectoral organisations was to speak for, and act, in the parent organisation's interests. All ten of the cases in this study can be considered as socio-political sectoral representation, where citizens act for themselves as delegates for an organised group. However, representatives did not always have the authority to sign off on agreements. Often individual members would have to take decisions back to their respective organisations before actions could be progressed. This presented problems for decision-making, but highlighted the importance of having the right individuals from representative organisations present at the decision-making table. Representatives should encompass the organisation's interests and speak for their organisation's membership.

Generally, government agency members were expected to present their respective agency's party line, but had limited devolved authority to allocate resources without checking with their senior officers. In contrast, community members often did not have funds to contribute, and had greater freedom to act and speak confidently on behalf of their constituents. Occasionally members from community-led regional organisations, however, did halt the process to consult with their constituents before supporting an option.

Geographic representation

Geographic representation drew spokespersons from specific communities. Individuals came from existing natural resource management organisations that were seen as

"representative" of the community in that defined area. These included stakeholders, such as landowners, within a geographic location.

> With XX going, we have seen a geographic gap, if you like, in that Blackwood woolbelt area. And have spent a fair bit of time canvassing people. [government person – regional]

An important function of individual members at LCD and regional scales was representing a geographic area (Table 4.1). Individuals spoke for distinct geographical areas in which they had a stake. Geographical areas ranged from subcatchment to sub-region. Representing a geographical area served several purposes: protecting the interests of that community by giving them a "voice" in decision-making; raising the awareness of other group members to specific issues; and promoting positive features of the area that would give a competitive edge.

> The Blackwood Basin Group doesn't deal with technical issues. I think they do have a sense of what people around them are thinking and feeling, and they do sort of represent that. They give a view of the bush and what the bush is feeling. I think that is more of what they bring. That is more valuable to us, the group, than the more technical skills. [support person – regional]

The main activities of geographic representatives, which included the LCDC and community-led regional groups, were to voice issues at higher decision-making scales for local action, and to inform other natural resource management group members of the issues in their area. In addition, representatives were active in competing for funds for their area. Representatives were often community leaders or active Landcare participants that possessed good local knowledge. Individuals were also responsible for reporting back to their respective groups.

> If your sub-region isn't supported by a member of the XX group, your issues for the region that you believe are important will not be seen as high priority, so that funding will not be coming to your sub-region or group … They saw that, "hey, we need to start inviting XX group members to our meetings, they need to know what we're doing, and where we're heading". [support person – regional]

> … slowly happening, LCDC is getting restructured where a lot more members are representing subcatchment groups, and I see that. That is how they should all be structured, that should be where the membership comes from. And after that happens, there will probably be more community support, because the linkages will be much better to get back to the grass roots or back to the individual farmers. [community member - LCD]

Respondents identified two problems with geographic representation. There was a tendency for representatives to have a single focus on their local issues. Second, it was evident individuals representing a geographical area were not active in communicating with their constituent communities. The implication of this was representatives may not be informing group decisions with true community values.

> People are generally representing their area and are coming from a position of leadership from their own area. They do bring leadership with them. People sometimes bring their own agendas with that as well, which can cause some grudges. [government member - regional]
>
> Sure, they're representing their community in the strategy, but they're not taking those ideas that I'm delivering to them out to the community… to as [the] community … that's not happening at the moment … right now I'm having to go to the community and work. But I'm going out to the community at the moment and collating all those ideas for them … it's really their ideas rather than community ideas coming. [support person – regional]

Politically-based representation

Politically-based representation was through local government. Often the Chief Executive Officer or community elected councillors were members of the group. These citizens represented the interests of the local municipality or local government association, and through their formal or elected positions represented the interests of the rural and/or urban community. Elected representatives were the "voice" of the broader community, and their inclusion in decision-making processes for planning and management of natural resources was a consequence of local government being recognized as a stakeholder. Local governments are also being directed towards sustainable development, through the adoption of Local Agenda 21 plans. Politically-based representation is often viewed by

government as warranted given the investment of public money in protecting the local environment (Binning & Young 1999; Kelly & Farrier 1996).

A notable feature of both the Avon Working Group and Central Agricultural Regional Partnership Group was the absence of politically-based representation. The lack of local government representation at a regional scale was seen by some Avon Working Group members as a deficiency. It was considered a significant oversight, given the need to have support by local government to assist in the implementation of the regional strategic plan. While the Avon Working Group was community-led, its natural resource management agenda and State government Ministerial origins precluded the involvement of local government. In regard to the Central Agricultural Regional Partnership Group, the absence of local government representation perhaps reflected the group's focus on agricultural sustainability, and/or lack of interest by Shire councillors in the Avon to nominate for membership.

Competency-based representation

Competency-based representation is the selection of individuals to committees, councils or groups, based on their knowledge, skills and experience. This type of expert representation also places requirements on individuals to possess some level of competency in relation to group functioning and decision-making. Competence representation does not have to be an exclusive form of representation. Individuals can be drawn from specific interest sectors or geographical locations, but they also must meet certain other requirements. These skills may include political savvy, negotiation and communication skills. This type of representation is currently prevalent at larger scales of decision-making. In addition, Wondolleck et al. (1996) identified that representatives may have abilities to optimise social networks, build external linkages, and possess the appropriate technical knowledge.

Denham et al. (1998) also noted the following as possible competencies: articulateness, self-other awareness, communication, conflict containment, accommodation, management of relations, leadership, and an ability to facilitate.

> In recent years all government or quasi government bodies are purely based on expertise, and linkages to organisations, rather, than being representative of organisations … all expertise based, or got the right mix with linkages, rather than necessarily representing the XX or YY [organisations] .[community member-State]

A problem with representation based on competency to participate is the exclusion of disadvantaged interest groups or communities who, for whatever reason, lack the communication skills, experiences, or expertise. If one perceives fairness as all affected individuals having direct participation in decision-making (Thibaut & Walker 1975), then competence-based representation fails to provide procedural fairness. Exclusion from participation based on non-competence, or failure to meet minimum cognitive or linguistic competence, is recognised as unethical (Palerm 2000; Webler 1995). The implications and problems surrounding competence-based representation reported in the literature were not identified by any of the groups.

Representation types based on competence, as opposed to representing constituents, government or a geographical area, was a feature of large scale organising – generally at the State and regional scales (Table 4.1). Competencies included a strategic focus, ability to liaise across scales, public speaking skills, ability to establish and maintain social networks, good knowledge of land management issues, acting in multiple roles, understanding of the "big picture", and leadership qualities. The choice of competency criteria also has political implications in that knowledge of Native Title issues was not included.

For the Soil and Land Conservation Council and regional partnership groups, the Minister for Primary Industry & Fisheries passed judgement on an individual's competency. This assessment was assisted by input from advisors, program managers, and Executive Officers, but selection was not peer-determined. The judging of competency for community-led regional groups was made after group discussion of an individual's suitability, even though individuals were nominated by parent organisations. Member of the Avon Working Group was based on criteria listed in Table 3.2.

Different skills and knowledge were sought after at different scales. The representation requirement at State level decision-making including strategic policy development was for "big picture" thinkers with strategic planning skills, as opposed to individuals interested in small scale management, with operational experience. At regional scale, where strategic planning occurred, budgetary and project management skills were important.

> It's very difficult to keep it up in that policy area, where committee people love to get into the nuts and bolts. It's what they're good at, and they want to get into the detail, and it was very hard. Was very hard for me for a long time, and still is, to stay out of that detail and focus on the policy stuff. [community member - State]
>
> Our weakness is that, probably, not many of us have had significant experience at a level of management. And to be a professional board member on a company like Wesfarmers or BHP would require some specific training, and some experience of that before you'd even get a look in. [community member – regional]

At regional scale, there was a distinction between the regional partnership and community-led groups in their level of focus and competency requirements. Regional partnership group members acted at a strategic level and were drawn from professional occupations with specialised skills, such as agricultural consultancy, banking, and accountancy. Important attributes were the cross-membership with other groups, and established external networks to inform planning and help implement the strategic plan. The Avon Working Group and Blackwood Basin Group members, on the other hand, had a dual perspective of strategic and operational approaches, and were mostly landholders with local knowledge.

The two community-led regional groups differed in their explicitness regarding competency criteria for membership. The Avon Working Group publicly identified the qualities being sought, which included strong local community networks, good knowledge of local land management issues, and good communication skills to represent the community (Avon Working Group 1998). In contrast, the Blackwood Basin Group had no such criteria, and relied on the LCDC community to put forward members with community leadership skills and land management experience.

The regional partnership groups did not make public their competency standards, however, the selection process relied on informal criteria. Determination of competency was made by the Minister for Primary Industries & Fisheries. There was no transparency in the selection process, or justification for appointment.

> Government person 1: Requirements for expertise - will they be considered and put in the advertisement?
>
> Government person 2: Not in ad, but expect to use them in selection process.
>
> Government person 1: Comment on applicants will occur, but it is XX [Minister] who decides. Chairman to identify persons wanted and send a letter. Program managers need to actively seek out possible applicants.

Types of Representation at Different Scales

Representation types within the different spatial scales were largely determined by the basis/criteria for selecting member, the group's mandate, their decision-making boundaries (correlated with geographical size), and reason for forming. This meant smaller scales of organising focused on agricultural production issues and to some degree nature conservation, while at larger scales attention was on broader integrated landscape issues.

A distinguishing feature of representation types at the four scales were the similarities between the State group and regional partnership groups in the use of competency and

sectoral interest representation, as contrasted to geographic representation that was used by community-led regional groups and LCDCs (Table 4.1). Additionally, self-interest representation was a type associated with community-initiated groups, such as community-led regional and subcatchment groups. As illustrated in Table 4.1, there was greater diversity in representation types at scales above subcatchment, with the greatest diversity at regional scales.

State

At larger scales of organising, representatives often provided more than one representation type (Table 4.1). At State scale, group members were providing representation based on competency and sectoral interests (conservation, primary producer sector, government agency or local government), with often the latter involving representation of a discrete community of individuals (e.g. agriculturalist, graziers and pastoralists, conservationists, local government).

> There was a problem there. But more importantly, I went on because I have experience - my qualifications in agriculture. I've got a deep interest in Landcare and land management, so I felt that I particularly could contribute because of my experience, and we needed to make sure there was a strong conservation voice on there as well … You don't go there just representing the Conservation Council, but you certainly do bear in mind the interests from where you come, and that is a conservation representative. [community member – State]

The dilemma facing representatives at larger scales was being able to negotiate for an outcome without "selling out", or acting contrary to the views of their constituents. Stocker and Moore (1999) state that membership based on competency provides individuals with the scope to negotiate unconstrained by the view of their constituent group.

Regional

The types of representation exhibited specifically at the regional scale were: self-interest, sectoral, geographical area, political and competency. This variety of representation types allowed for a range of different models of regional organising by decision-making bodies. Self-interest appears to be an underlying component of regional representation only in community-led groups, and absent from government-led groups. An interesting point is that the similarity between the State Soil and Land Conservation Council and regional partnership groups have in representation based on competency and sectoral interests.

The regionalisation and regionalism that has occurred over the past decade in Australia has led to the formation of a range of regional groups. Regions extend over large geographical areas, and cover a range of resource users and communities. To cover the public interests of rural communities, groups require political representation through local government members and community interest groups. Environmental issues are complex, and require a level of skill and knowledge. The regional groups in the study showed diverse types of representation due to the history of the group and its goals, and the biophysical and socio-economic attributes of the region.

LCD

Representation at the LCD scale was predominantly based on representing a geographical area, as well as self-interest, sectoral and politically-based representation (Table 4.1). Skills in the areas of communication, leadership and group process were valued attributes. Politically-based representation was through local government representation, and through the Soil Commissioner nominating all members (Table 3.2).

Subcatchment

Representation at subcatchment scale was based solely on self-interest, a feature shared with the LCD and community-led regional groups. Representation was by agricultural landholders directly involved in land management within the subcatchment's boundaries.

4.4 Roles of Representatives (Role-Making)

In contrast to section 4.3, where the roles taken or available to members were explored, this section examines the roles that were made or created by members within the case study groups. These were roles created and functioning within the group, but also played out in settings beyond the group. Notions of role-making are based on recognizing the agency of individuals and their ability to create ways of undertaking action. Three main roles were created by members within the case study groups: leader, negotiator, and information conduit (Table 4.2). Leaders set direction and provided support within their case study group. Negotiators worked with other group members to advance or protect constituent interests. Information conduits carried information back and forth between their case study group and the broader community. At all four scales, acting as negotiators and leaders were the roles created by members (Table 4.2).

Table 4.2 Roles Made by Representatives.

Current role	**State**	**Regional**	**LCD**	**Sub catchment**
Leader	X	X	X	X
Negotiator	X	X	X	X
Information conduit	X	X	X	

X – denotes presence of roles at the scale

Role as leader

> Leadership is an organizational resource that citizen organizations require for any type of action. (Nelson et al. 1990, p. 167).

Representation in groups was comprised mainly of community leaders who were active participants in the Landcare and natural resource management arenas. Community leaders were dedicated and energetic individuals, "local champions", who networked with other community members, government agencies and organisations through their membership. Community leaders were a feature of all groups, but especially prominent at larger scale (State and regional), where most community members were considered "leaders" in their own right. These individuals were the connection to affected citizens. They were often well known in their communities, and generally had a long history of participating in natural resource management groups.

> I think they are natural leaders in the community, and I think they see that it is a venue for them, and feel that they can do something at a bigger scale. [support person - regional]
>
> … need to have good connections, community members powerful in their own community … feedback the other way Blackwood Basin Group to LCDCs and Blackwood Basin Group to subcatchments. More time to put back into the community and not selecting those power leaders. [community member – regional]

Leadership was a common feature of representation voiced by most members. Holding a representative position provided the means for community leaders to progress "big picture" ideals, and direction. Frequent reference was made to representation as a position for leaders in the community.

> I think they are natural leaders in the community, and I think they see that it is a venue for them and feel they can do something at a bigger scale … you get the Shire President or someone who has been the Shire President, so they are or have been leaders. They are leaders, so they obviously see the next level or next stage … I think that role that they do play is one of vision setting. [regional coordinator]

Of the two community-led organisations at regional scale, only the Blackwood Basin Group recognised the value of drawing on formal community leaders (e.g. elected local government councillors). Membership included community leaders from each of the sub-regions.

The presence of local government representatives on groups was recognised and valued at LCD scale, where a councillor and the Chief Executive Officer participated in decision-making. An identified problem in securing broad support for group actions was the lack of recognition for formal leaders.

> Shires don't have an understanding of environmental issues for the region. And if the Avon Working Group members were going to be the umbrella for their region, why weren't Shires involved? [support person - regional]

Community leaders at subcatchment scale frequently had a strong Landcare ethos. Often these individuals held a formal community leader status as local government councillors.

Do community leaders truly represent all farmers? The extent to which community leaders represent the interests of marginal farmers[4] or the views of other agricultural (sub) cultures was not raised by any of the interviewees. The majority of community representatives at LCD scale and upwards were either recognized community leaders or successful landholders. A concern expressed by Vanclay and Lawrence (1995) was that such farmer representation may not adequately convey the issues and problems of other members (other farming and non-farming representatives), and prevents representativeness. Sociologists argue that such representation is not true participation, no matter the number

[4] Marginal farmers refer to landholders who farm on marginal land and have low economic return from their farming enterprise.

of representatives, due to differences in sub-cultural locations, language, ideology and value systems.

> There is a real danger that such participation is token or symbolic, rather than genuine. Furthermore, there are reasons why having farmer representation does not demonstration participation … the small number of farmers appointed to the various committees … could not possibly hope to represent the diversity that exists within agriculture … representatives tend to be appointed from the ranks of top-end farmers … they do not share the same structural experiences or (sub)cultural identities as other farmers (Vanclay & Lawrence 1995, p. 11)

Most representatives in the case study groups took both formal and informal leadership roles. Sources of leadership were derived from a leader's expertise, personal influence, and previous power relationships (Nelson et al. 1990). This means leaders used their expert knowledge and skills, an influence process whether it be charisma or loyalty, and their position of power to get trust and commitment of other group members.

The role of leaders was markedly more important for representatives at State and regional scales, who took on leadership roles within case study groups. Individual members at these scales were automatically viewed as leaders due to their knowledge of natural resource management issues, understanding of issues in their geographical areas, current or previous leadership role in the broader community, and expertise in participating in decision-making forums.

Representatives acting in a strategic planning and management mode showed leadership by displaying skills and knowledge in strategising, initiating dialogue, challenging assumptions, giving guidance on specific issues, introducing new issues or innovations, communicating their visions, and identifying solutions. For respondents, a leadership role was not only about having the requisite skills, but also the committed actions of consulting with constituents.

> Leadership is also taking stuff back to people and the broader community. [community member – State]

Role as negotiator

Another fundamental role of individual members was as a negotiator. Negotiators engaged with others in the group over a particular issue where a mutually acceptable outcome was being sought. A role of representatives was to negotiate outcomes through a decision-making process involving discussion, with the aim of resolving conflict over issues, to reach an outcome everyone accepted. The negotiator was particularly useful given the presence of self-interest representation in most of the groups, and the tendency for individuals to hold entrenched views. From observation of decision-making at larger scales (State and regional), decisions were often reached through discussion leading to consensus, and not through formalised voting.

> This is my point: you're there to come up with some sort of joint common good, hopefully of the things that you're trying to achieve. If you just go in there with "this is our line" and "this is what I want you to accept," well it's pointless. You've got to go there on the understanding that you're participating in a negotiated discussion to come, hopefully, up with a good outcome. [community member - State]

Role as information conduits

A part of representation involves group members participating in regular two-way communication with their constituents, communities, or organisations. Engaging in dialogue with different stakeholders, and with community and government sectors, allows synergies to be identified that would be mutually beneficial.

One of the major roles of members was disseminating information back to represented groups and the public. This role covered communication of group decisions and actions, attending meetings of other groups and sharing information with the wider community. This position involved the responsibility of being an active communicator. Generally, all

group members held the expectation that individuals would report back on decisions taken, and the actions flowing from those decisions. In reality, there was acknowledgment and acceptance by most members that this role was not always occurring, with some members weak in fulfilling this responsibility.

> You've got two responsibilities, one is to bring your opinion and your stakeholder view to there. But also it's a two way process. You take stuff back. Some people think in these processes that you're only taking stuff in, but a very important part is you're there to show leadership. You're an advisory body to government, and supposed to be the agency, but particularly the government, you're expected to show leadership. So, leadership is also taking stuff back to people and the broader community. And I think that in some people's limited view, like, I try to take stuff back to our groups. I think that's what other people need to be doing too, and I suspect that's a bit limited in some forms. The farmers in particular are quite good about doing the two ways. [community member- State]

Time and resources, geographical dispersal of communities, and the organisation's management focus limited the communication of information by individuals. Acting as a conduit for information was difficult for individual members when the communication link between the representative and their constituents was weak or nonexistent. Problems arose due to the dispersed geographical distribution of their constituents, frequency of meetings, and reporting arrangements.

> They might report back to their own LCDCs when they go to meetings … [but] there are 22 [LCD groups] … The upper catchment is so poorly represented; two people representing 14 Shires, and LCDCs who they don't even communicate with. [support person - regional]

The perception of community members was that political representatives were more active in disseminating information and communicating with their respective organisations than the other types of representatives.

> … an understanding of where the boundaries of "what is" and "isn't" acceptable. Maybe that's a point there too, but I also think it's a sign that political reps are probably - they're willing to take it back to their organisations a bit more. [community member - State]

Roles of Individuals at Different Scales

The above discussion is extended here to describe these "created" roles at each of the four spatial scales. Each group's activities associated with their case study decision (section 3.3) are used to help focus these descriptions.

State (Decision – drainage reform)

Representatives at State scale were leaders, negotiators and information conduits to governments and communities (Table 4.2). Leadership was a valuable planning resource, with representatives possessing good expertise and knowledge of natural resource management issues. This allowed members to express views on the policy and administrative options available on drainage. A negotiation role was essential if controversial issues, such as deep drainage, were to be resolved. Representatives participated in an open decision-making process. The sharing of information on deep drainage created an environment for collaborative learning. In their information conduit role, representatives often utilized cross-membership links, but there was a limited transfer of information by representatives being exchanged back to the wider Landcare communities. The organising and structuring of the decision-making processes facilitated and supported these roles taken by representatives.

Regional (Decision – regional strategic plan)

As with representatives at State scale, those at regional scale functioned in all three roles (Table 4.2). Conflicts were primarily interorganisational in origin. As such, it is not surprising that conflict was present at the regional scale. There were multiple representatives with very different interests trying to resolve value-laden natural resource management issues. They participated in a negotiation role assisted groups to work towards collective decisions that sought to satisfy shared goals.

Acting as a conduit for information was necessary to allow representatives to inform the strategic planning process. The exchange of information at regional scale was predominantly, within each case study group, between government and elected community representatives, and to a lesser degree from the regional organisation to LCDCs and other represented interest groups. When feedback of information occurred between regional members and smaller scales, it was restricted to their local farming community in their subcatchment group and LCDC.

The community-led groups at regional scale tended to focus on their respective parent LCDCs and subcatchment groups, omitting regular reporting to other constituent groups. To overcome this problem of ad hoc communication, community-led groups mailed out regular newsletters informing the Landcare and broader communities of their strategic planning activities. The regional partnership groups selectively communicated with a targeted audience, such as local government authorities and specific industry groups.

Leadership was linked with representatives' information role. By actively engaging in the planning process and informing communities, representatives displayed leadership. While leadership roles were formally attributed to certain group members (e.g. Chairperson), often people just assumed the role.

LCD (Decision – tax rebate and impact of deep drainage)

> … each member of the LCDC is a representative from the various [sub]catchment groups, so that those members can go back to their [sub]catchment areas and detail from "what is happening" on a local level on the LCDC. Basically, the LCDC is becoming, more and more, probably an overall management role. [community member - scale]

Cross-representation between the LCD and subcatchment scales was aimed at informing each scale, coordinating activities across subcatchments, and progressing large scale projects (e.g. roadside conservation). Members acting in an information conduit role reported on local Landcare news at LCDC meetings, and communicated information at their subcatchment meetings. In terms of representatives' negotiation role, individuals were each protecting their local areas and trying to optimise outcomes. Representations at LCD scale lent standing to representatives, due to its statutory basis and links to Ministers. Due to these features, representatives sought to use LCDCs to progress natural resource management issues important to them. In the Dumbleyung LCDC, many representatives undertook negotiation roles to resolve the conflict in the community over deep drainage.

Subcatchment (Decision – nature conservation planning and Focus Catchment planning)

Many respondents at this scale mentioned negotiation as a role. As subcatchment plans were developed, each member sought to optimize the Landcare works carried out on their farms through negotiations within the case study groups. For example, members of the Wallatin Creek Wildlife and Landcare Inc worked together to reach a mutually acceptable outcome for strategic revegetation. This often meant members discussed and planned Landcare activities with their neighbours. While individuals undertook some leadership roles through formal and informal positions, little attention was given to sharing information with the broader community (Table 4.1).

4.5 Desirable Attributes of Representatives

Desirable attributes were those mentioned by respondents as important features of representation, either through commenting on their presence or lamenting their absence. In this section, these attributes in relation to representation are described (Table 4.3), and then

explored in detail in relation to their absence and/or desired presence at the four spatial scales. This exploration is a central part of the explanation-building guiding this study (see analytic approach section 2.5).

These desirable attributes go beyond the roles "taken" through representation and roles "made" through representation, as described in sections 4.3 and 4.4. There are elements of these role activities evident, such as concerns regarding competency (a role taken) and transferring information (a role made). Other attributes, such as active participation, credibility and adoption of a group identity, transcend the roles previously described (Table 4.3)

Table 4.3 Desirable Attributes of Representation for Social Sustainability.

Desirable Attribute	**Description of Attribute**
Active participation role – internal & external	Active participation in group activities - contributing to group discussions, actioning decisions, seeking out new information and relaying information to constituencies.
Competency – skills & knowledge	Skills, expertise and knowledge of individuals to contribute to successful outcomes.
Acts credibly in role	Credibility based on valid and competent representation, and projection of a positive group image.
Adopts group identity & commitment	Representatives identify and align their organisation's goals with those of the group, and foster ownership of group outcomes.
Two-way communication	Sharing and exchanging information with constituents and other group members.
Established social network	Participation improved through formal communication and information transfer, and informal structures that develop knowledge.
Ability to function in multiple roles	Can wear multiple "hats", adopt new identities and roles, allowing representatives to act in more than one representative capacity at different scales.

Active participation role

Most members commented on active participation by some members, and their dissatisfaction with others' roles and contributions. The following quotes are illustrative of concerns at all four scales, particularly in relation to the community-led regional groups.

> The XX rep on the Avon Working Group asked me to report on the Avon Working Group meeting, whereas actually he should have reported, because he is a member, and he didn't see that that was his role … I did, but really. That should have been his role and not anybody elses … we were doing the members job … we were holding their hands. [support person – regional]
>
> If we could of [sic] consulted and taken the opportunity to get the members involved in the consultation, and get the members to actually represent the Blackwood. Get them to go out to their Shires, and it could have been really easy. And we offered to them for them to come along with us and no-one has shown up. [support person – regional]

Scott (1998) mentions five important factors for obtaining the active involvement of representatives which include members recognising the perceived value of participation, time availability, motivation, geographical location, and cost of attending. Reported problems included group members falling asleep, taking a passive listening role without exchanging information, and failing to prepare adequately for meetings (by not reading briefing documents) or not attending.

> Some people participate better than others, without naming any - because I would get into trouble. But, certain members do fall asleep during some meetings. [community member – State]

Group members saw part of this participation as communicating with others beyond the case study group.

> Farmers don't want to see a book … they don't want it handed to them in their post box. They want an Avon Working Group member to attend a meeting in which they can explain what the strategy is all about … I believe the Avon Working Group members should be going out and seeing people in their own right. [support person – regional]

To retain personal credibility with fellow constituents and other representatives, representatives must maintain cohesion in their constituency group (Wondolleck et al. 1996).

Competency – skills and knowledge

Group members defined competency as having knowledge, communication, and leadership skills.

> I think its [the group's] become a lot more efficient. Some of the membership has changed, but that's just brought in new skills and new ideas … I think it works a lot better as a group now, and I think we're more skilled. [community - regional]
>
> … a good core of people, so there's quite diverse thinking there. There's people from an accounting background, there's people from a banking background, there's people with a direct farming background, who are participating in program activities … so they're all people with direct input to the program that have gotten very good skills in that area, and have been good for the program. [government person – regional]

Some individuals identified greater competency in State government agency members in contrast to community members. Agency members had the advantage of dealing with planning and management issues daily. In parallel with the acknowledgement by group members of deficiencies in skills, was an enthusiasm to develop expertise.

> [The agencies] … are dealing with issues on a day to day basis. The members only deal with them on a month to month basis, so they have got a distinct advantage … they know their subjects better than some of the members do, and they know how to deal with it better than the [community] members do. [community member – regional]
>
> A three day course on marketing certainly opened my eyes … I think I'd be quite interested in following up marketing opportunities within the group, and going out there and actually talking with corporate bodies. But I'd certainly need more skills development to it in any real way. [community member – regional]

Acts credibly in role

Representatives are expected to act in a trustworthy manner in their role. This credibility was threatened when individuals could not deliver on expectations given to communities, failed in their representation role to be open with information, or failed to carry out activities in the best interests of their constituents.

There were three levels at which credibility was important. Credibility in the role of community representative was important to individual community members, to the group, and to government agencies. The reasons were varied, and included representatives being perceived to be acting in the best interests of their constituent group; being worthy of securing resources and funding for the group; and government agencies being able to utilise natural resource management groups to get communities to implement policies and projects.

The credibility of community members as representatives was based, in part, on the method of representative selection. In the Avon Working Group, for example, the founding members of the group were Ministerially appointed, while newer members were elected from their natural resource management community. There was a perception by those founding group members and new members that being elected into a position gave greater legitimacy to their role as a community representative. Also of importance to credibility was an individual's standing in the community, as determined by their past experience on groups, ability to function as part of a team, experience in Landcare activities, and their own business success. Similarly, the credibility of government representatives was equally important in decision-making. The image projected by government personnel of their competency as they functioned as advisors influenced the interactions between landholders and government, and subsequent perceptions of the decision process.

> Once again, lack of expertise from the Agriculture Department was a problem. XX was not very well trained in dealing with people, especially farmers. [community member - subcatchment].
>
> We just didn't have the skills to facilitate that process effectively. We just had technical skills, and so consequently it very quickly became apparent to me that this was not going to generate the [right] sort of solutions. [external person – subcatchment]

Adopts group identity and commitment

> Members wear the "sustainable rural development hat" and not [that of] their area or interest. … It's good for the working of the group. [government person – regional]

The challenge for a representative body is being able to engineer a single view, manage a range of divergent interests (Scott 1998), and develop a group identity. Studies of planning processes (Moore et al. 2001; Warner 1997) have recognised that commitment is essential for successful planning. Furthermore, commitment gained through participation is valuable for future sustainable management of resources (Hartig et al. 1996).

Development of a collective group identity meant that a representative did not just focus on their organisation's viewpoint. As mentioned earlier, individuals undertaking a negotiation role accepted the need for flexibility in their positions. Often during the decision-making process representatives did express their organisation's position on particular issues. But interests were in keeping with the constituent group's politics and fulfilling their representation "role", as opposed to taking an immutable stance.

> Sometimes, it's really curious. They [representatives] can see that the decision that's been made is the right one, but for political reasons in the organisation they need to be seen to be abstaining or opposing it, whereas that's not why I do it. It's because I think, in principle, they're making the wrong decision … [I] remember this was on the clearing stuff … you could tell XX [representative] really supported what we were doing, but occasionally he had to say well this is YY's [organisation] line. But, we managed to work around that generally. [community member - State]

By being cognisant of the group's purpose, their diverse interests, and the need to collectively seek solutions, members worked together as a group. Establishing the decision-making process, and the group as the "place to be" (Moore et al. 2001), describes people's perceptions of commitment to continued participation. This concept has been presented elsewhere (Moore & Lee 1999; Fisher et al. 1991; Benveniste 1989). In this study, it was exemplified by community members' observations of the strength in being part of these case study groups.

> We've got an integrated body there. I think that's one of our strengths: that we can see everyone else's point of view, and we've got some fairly intelligent [people]. And people that have got a lot of experience around that table too. That helps. [community member - State]

Commitment by representatives was evident through individuals attending meetings, actively participating in decision-making, and exchanging information with the broader community. These findings support those of Wild and Marshall (1999) where the importance for participatory practices comes from the commitment by elected representatives, and the need for participation to be an on-going commitment with preparedness to satisfy community.

> I perceive [that] we get the agenda. What we should be doing is reading it. And if there are questions, we should be going out to our community asking them what they think. And then bringing that information back, because we are representing not ourselves. We are representing the people out there. [community member- regional]
>
> … continued lack of representation from lower Blackwood. [I] recognise [that the] previous person had failed to attend most meetings. [community member - regional]
>
> The weaknesses are, I think, the fact that it's dysfunctional. [I] think the membership is dysfunctional … they don't have this fire in the belly – ownership. [government member – regional]

A strong sense of identity with the group was seen as an important attribute by respondents. Evidence of this group identity was shown by representatives actively representing the group in the wider community. Such representation required confidence in

their image as a “representative”, and continuous development of public speaking skills. Group representatives, particularly at large scale, needed to “wear the hat” of their group so as to promote their group, and enable community members to identify with them as the representatives of their interests.

> Group members that don’t go out, that aren’t sure of what their jobs are. So depending on your level of confidence, the ones that are confident are actually going out to the community and representing the Avon Working Group. The ones that aren’t confident, they’re staying under their own single river. They are LCDC members and Shire members, and they’re tending to stay within the confines of that, rather than going out there as “here I am, I represent you as a community”. [government person - regional
>
> … having that ownership, the thing that’s not happening at the moment. Sure they’re representing their community in the strategy, but they’re not taking those ideas that I’m delivering to them out to the community. To ask community, “this is what we are discussing at the next meeting, I need some ideas”. That’s not happening at the moment … and it’s really their ideas rather than community ideas coming … and that’s a stepping stone we’ll have to get to. [government person-regional]

Accepting responsibility of a representative role in a group was open to interpretation by some members. While there were individuals who regularly attended meetings, they did not actively take up a representation role in their communities. This reflected the crisis in commitment by certain representatives that occurred within some groups.

> … responsibilities of being a representative, yes, do more as reps, not just attend meetings. More they should be doing: flying the flag, available to talk to Shire. If you aren’t at a meeting hearing how your group is being treated, [you’re] not doing your job. [community member – LCD]
>
> In order for the rest of the group to take on responsibilities and decision-making, we are often a little bit disappointed in that. We find that some members just really see their roles as turning up to meetings, and not be undertaking activities in between those meetings, or have really done preparation for meetings … I think we’ve still got a little way to go in getting a good depth of membership there, and people that are really prepared to put in. [government person – regional]

Two-way communication role

Comments by participants in interviews and meetings highlighted perceived deficiencies in the information role of representatives. Group members increasingly wanted

representatives to improve their communication with constituents in communities. The credibility and power base of representatives was enhanced through them communicating with the wider community. Wondolleck et al. (1996) found maintaining effective communication links with constituents to be an essential component for representative participation.

A poor understanding of group projects and activities prevented members from communicating information back to their constituencies. In further support of this point, group members at the Blackwood Basin Group meeting were asked about the regional projects, but the majority of community members were unable to provide details.

> It [active representation] does not rely on the communication officer. Members don't understand what is going on, so don't relay information. Hav [ing] improved the members' awareness and understanding of projects, members felt apart from it at each meeting. [community member – regional]

Community consultation and representatives' role as an information conduit were at times constrained by factors relating to internal group concerns of increased conflict over sensitive issues, consulting over a predetermined decision, and the lack of agreement at the decision-making level. For example, there were variable comments from individual members over consulting with communities and constituent groups at State scale on matters of land clearing and deep drainage. A few community members stated the need to communicate with their groups, while other members opposed consultation on the grounds of creating further conflict.

> … don't consult community over clearing, why consult on something as conflictual as clearing [government person - State]
>
> … no point in listening: as community want to clear land, politically sensitive … why open a can of worms. You know what they are going to say [government person - State]
>
> … inappropriate for it to go out for consultation, when we can't agree on it here around the table. No way to engender the community support [community member - State]

> No point in consulting unless you are going to listen - and we can't [community member - State]

These comments support current understanding on "token" consultation, and the timing of public involvement in decision-making. The making of key decisions by government means public comment may become a mere formality (Smith & McDonough 2001). Community engagement also needs to create conditions necessary to allow future involvement to occur (Tuler & Webler 1999). A reluctance to participate may result from citizens' past experiences in public participation processes, where expectations were not fulfilled (Botes & van Rensburg 2000).

Two-way communication was more difficult at larger scales. It was difficult to capture the interests and views of a diverse and geographically dispersed community, and disseminate information back to local communities. This issue was most problematic for regional groups, especially the community-led ones.

> [We] need to remember our spatial boundary of our region – it is very large – we need to get out and meet and be known. [community member – regional]
>
> Where we are directly involved in our community, they know the Avon Working Group through members. But other areas don't. [community member – regional]
>
> One would like to think that the regional partnership group represents a cross section of community and industry views. And that's another area we probably need to improve: to make sure we are representative and take some time to council other views … maybe it's too easy to sit there and have an opinion in isolation. [government person – regional]

Established social networks

Social networks are an organisation of members, functioning as formal and informal communication structures, to assist in the transfer of information (Sobel & Curtis 1999). Networks can also be defined as small definable overlapping entities within a broad information system that allow for socially constructed knowledge (Lockie 1994). As informal structures, networks link information and actions across people, groups, areas,

and scales of organising for sharing of information. Networking contributes to citizen power and effectiveness, and assists in coalition-building. It provides communication linkages between different citizens, and has proved especially useful in the resolution of environmental disputes (Nelson et al. 1990).

In rural communities, farmers have distinct networks constructed on socio-economic features, and less on geographical proximity (Lockie 1994). In this study, group members' reasons for joining Landcare groups centered on getting to know their neighbours and enhancing their knowledge. Having a good network was a valued commodity. Networks were a useful resource for obtaining reliable and up-to-date information to inform decision-making. At State scale, most group members relied on their networks to share information.

> They're only connected to them through the feedback they get through their networking, and XX going out seeing Landcare groups and members talking to them. [community member – State]

Desirable networking attributes of representatives at State and regional scales included linkages to specific networks, the broader community, and larger scales of decision-making.

> Ideally, we get people that are well connected, with export markets and [a] business focus. We don't want just the "good old" Landcare reps any more … If we don't get those people, we said at least we'll need to tap into those networks. And, I guess that's probably what we're going to have to do. [government person - regional]
>
> Skills wanted include: private consultants, banking sector, commitment to the job, strategically thinking farmers – [who think] beyond their region and interpret requirements at the State with a regional focus. [community member-regional]
>
> Wide and diverse groups don't have representation of parts of the dynamic farming community (middle type farmers). [It's] not intended to be representative. It is diverse. So the diversity of the group reflects the diversity of the region. [It] brings in a whole range of different skills, and different networks. For example, XX, who is the consultant who works for the diary industry, his knowledge, and he talks to farmers over things that are really important to them – financial states, etc. [government person - regional]

> New members need to be people with connections, where we need stronger ties and expertise and networks, marketing experience, connections with research, and connections with South-West Development Commission. Can't lose credibility of community, may need a farmer, etc. - contact with local community … commerce or local government background. [government person - regional]

Gaining access to other people's networks and sharing contacts was an advantage for individual members. Networking was also used to obtain specific information.

> You share information and your networks, so one of the things that you get from it is your network and information. You get access to networks and people, and people's opinions that you wouldn't normally in the course of events … [community member – State]

Ability to function in multiple roles

> … interest in value adding, personal attributes to be able to take up SRD hat, good talkers and communicators. [government person – regional]

The ability to wear multiple "hats" and act in more than one representative capacity at a number of scales was identified as a valuable attribute, particularly at larger scales. Undertaking numerous roles requires group members to adopt new identities and roles dependent on the situational context. Members, who participated in several groups at different scales, either in a peripheral manner or in formal roles, required the ability to recognise more than one group's interests. The analogy of putting on and off representative "hats" was used by a few members, to show a specific representative identity when attending group meetings.

> As a representative on that group, I very much have the XX [government agency] hat on, but at the same time seek to provide the group with advice from the perspective of their own interests, which are not necessarily the same as the [XX] interests … don't comply exactly 100%, there's about an 80% overlap mostly. [government member – regional]

There were some community and government members who were expert in adopting different roles. For many participants representation was an art of balancing roles and

being skilled in consciously making the transition between roles. Wondolleck and Ryan (1999) in their study of government agency roles in collaborative processes spoke of the "wardrobe" of government members, and the specific roles and "hats" worn by individuals to fulfill their responsibilities. Each role taken is completely distinct, they are "not seamlessly merged into one" (Wondolleck & Ryan 1999).

Hall (1995) notes that civil society is characterised by multiple identities. There is a need for individuals to have the capacity to move between such identities, and to recognise what they are doing. In this group context, this means individuals operating within and between a number of natural resource management groups. Several members with cross-membership with other groups at different scales were noted as being better skilled at functioning in these multiple roles than others.

> This is an example of how a key stakeholder still has no idea, because a member hasn't done their job out there … I think XX sees himself as an "XX" member, and not just an Avon Working Group member. I really do. He is unable to blend everything together, but unlike YY who is able to wear his hats and take them off at the right time, and do so well with all his roles. [government person – regional]

> I try to participate, as do many people. Although you're there representing, and there's different approaches that government takes now. They're taking less that you're representative, but you're there in your own right as an expert in something. But, in this case you're there representing a certain view. But, I take the view that when you step into the room you also, to certain extent, take that hat off. And while you can never leave it behind, you try and look after conservation, as well as looking after other things, because you're there as a group. Whereas some people step in and don't do that, they step in and see very narrow perspective. Just, "I'm going to look after this patch and as long as that's dealt with I don't care about the rest". [community member – State]

Desirable Attributes of Representation at Different Scales

The last part of explanation building for representation by individuals is cross-case analysis. This analysis relies on a comparison of desired attributes with their presence or absence at each scale, and then broadens the comparison across the four spatial scales (Table 4.4). If an attribute is not mentioned by respondents at a particular scale this is not

equivalent to not important. Because of the different origins, structure and functions of the regional community-led vs government-led groups they have been separated in the following analysis and discussion.

Table 4.4 Desirable Attributes of Representation for Social Sustainability at the Different Scales.

Desirable attribute	**State**	**Regional**		**LCD**	**Sub catchment**
		Government -led	**Community -led**		
Active participant – internal & external					
Competency – skills & knowledge					
Acts credibly in role					
Adopt group identity & commitment					
Two-way communication					
Established social network					
Ability to function in multiple roles					

Light shade - attribute desired and present
Black shade – attribute desired and absent
Gray shade - attribute not mentioned

Respondents at State and regional scales identified a large number of desirable attributes for representatives. Two possible explanations are a perceived deficiency in the current approaches, or higher expectations of State and regional organising. The trend towards regional natural resource management delivery is certainly placing greater expectations on

regional groups, with greater expectations of representatives at regional compared to LCD and subcatchment scales.

Another feature obvious from Table 4.4, was the disparity between government-led groups and community-led groups, in terms of the desirable attributes present. Government-led groups had more of the desired attributes present than the community-led groups. There were similar expectations in terms of representation for the two different types of regional groups, but these expectations were better met by the government-led groups. The reasons for this difference are not obvious, apart for the community-led groups encompassing a much greater diversity of representation types (Table 4.1), which may have confounded (made more difficult) the tasks of representatives, as measured against the desirable attributes. Other potential contributors to this difference could be the expertise and competency basis of representation in the government-led groups, their use of facilitators to assist in developing representation skills among other things, and a prescribed role for representatives and group mandate in these groups. All three of these potential contributors would have helped representatives understand and complete their “tasks”.

At LCD scale, besides being an active participant, being credible, and adopting a group identity and commitment, there were no other expectations. There were only two attributes identified as desirable for subcatchment scale. At these smaller scale, none of the desirable attributes sought were present. Perhaps the expectations associated with representation at these scales are lower and satisfied by individuals attending meetings, contributing to discussions and supporting collective action in their subcatchment.

An analysis of the attributes across all scales (i.e. reading across the rows in Table 4.4), shows that commitment was a desirable features at all scales, along with active

participation by both community and government representatives. Credibility in the representative was desired at larger scales, but not at subcatchment. Two-way communication, skills in social networking and functioning in multiple roles, was identified as desirable at only the State and regional scales.

State

At the State scale, most of the desirable attributes already existed in the group and were recognised as positive features (Table 4.4). The two desirable attributes lacking were active participants and two-way communication. The lack of active participation by representatives was not indicative of all members, but it highlighted the need for all members to be contributing to discussions.

> Representation. There is some dead wood here and that needs to change. [community member - State]
>
> There is [sic] probably three people or maybe four people have not contributed much at all, and its been left to a very narrow group who actually drive the council … They are not strong drivers of the council, and I like to be on an organisation where everyone is pulling together. [community member – State]

The lack of two-way communication by participants may be due to the reliance by representatives on their accumulated knowledge and experiences. Also, participants may perceive less need for community members to consult with their communities on all decision matters. The Council members viewed themselves as representatives utilising their experiences and insights, rather than as a body of representatives reporting back to the natural resource management community or resource sectors.

Regional

The desired attributes of representatives at this scale were numerous, and suggested respondents have high expectations of representation at regional levels. The other prominent feature at regional scale was the difference between the government-led groups

(South-West and Central Agricultural) and community-led regional groups (Blackwood Basin Group and Avon Working Group) in the desired attributes present.

The perceived shortcomings of community-led regional groups against the desirable attributes are captured below.

Active participant – internal and external

> … comes from frustration in that some members that appear to be just filling a place and doing a bit of the talking but not much of the action. [government person - regional]

Competency – skills and knowledge

> Yes, there are criteria that nominees need to report on in their applications. Really, they are only effective communication skills, and being able to deliver issues from the community to the Avon Working Group, and be able to deliver the other way as well. That's about the only skill. So we're really only looking for good communication skills. But, because the Avon Working Group doesn't do the selection, the community does, there's no way of knowing whether that community's "decision-making" on the elections. Whether they've adhered to the criteria or not, or whether it's just their good friend in that local vicinity. So, I suspect it's more a case of community's knowledge about the person in terms of what they've done in natural resource management, rather than looking at their individual skills. [govt person – community - regional]

Adopt group identity and commitment

> They also need to commit themselves to a reasonable amount of time, and that's one thing that I don't believe that they're doing at the moment. Some of the people we've got on there are good from the point of view of their expertise and their background. But, they're just not prepared to commit the time that is required for our group to become a leader in the region … [The] lack of commitment by some of the members is certainly slowing the progress down. [community member – regional]

Ability to function in multiple roles

> Brought up in our last meeting was that when Avon Working Group members go out and talk to groups – [there is] the need to have their Avon Working Group hat on. We're finding that when members do go out, they go out as nobody. So, community people don't know who they represent … so, they're just another body in the crowd … There are even agency people that go out to the community and they don't know which "hat" they're wearing. For example the XX [interest group] representative YY when he went out at a meeting just recently he was wearing his XX hat but in fact he was invited to that meeting

> as an Avon Working Group member … so, when they go out, they're not representing the group they're supposed to be. [government person – regional]

Both forms of regional organising showed deficiencies against the desired attributes in terms of two-way communication and established social networks. Such communication was obviously difficult for individuals due to their volunteer status, limited resources, and the large geographical area to cover. The expectation of continued dialogue between representatives and their constituents, as part of a representative democracy model, appears to be a major problem at regional and larger scales of organising. The absence of established social networks for representatives beyond the case study groups was identified as problematic, given their reliance on contacts to fulfill their "brokering" role.

Can regional, community-led representatives meet these expectations? Most members are volunteers, active in their communities, and with their own farming or business ventures. In addition, representatives must travel large distances to attend numerous group meetings. There may be a difference between what is desired, and what is realistic given the resources and time available.

LCD and Subcatchment

LCD and subcatchment scale were very similar in the desirable attributes identified (Table 4.4). Regrettably, zero attributes were noted as desired and present. Rather, a small pool of attributes, three at the LCD scale and two at the subcatchment scale, were identified as desirable but absent. These were active participation, credibility (LCD only) and commitment.

> [A] weakness is some members don't turn up regularly. [community member – LCD]
>
> There's of lots of people who sit on the committee, but don't contribute a lot. [community member – LCD]

A number of attributes mentioned at larger scales were not mentioned at all at LCD or subcatchment levels, including: competency, credibility (subcatchment only), communication, networks and multiple roles. It seems that participants had fewer expectations regarding representation at these smaller scales. They were most concerned about how active, credible and committed their representatives were. However, at both of these scales their expectations were not met, perhaps in part because of the strong self-interest focus of representation (Table 4.1). Participants certainly did not have the range of expectations of representation apparent at larger scales (Table 4.4).

> Eight to ten farmers in attendance, very low attendance … not a strong commitment to attend meetings, and it could be just the type of community … just won't get commitment. [group coordinator – subcatchment]

4.6 Roles of Groups

This section examines the roles taken by the natural resource management case groups in their interactions with the broader community. These group roles differ from the previous section's attention to individual roles. This dual focus is necessary, due to organising for natural resource management being influenced by both individual and group roles. A group's roles were largely a product of its statutory basis, the scale of organising, its membership composition, and relationships with government agencies. In general, groups are involved in developing goals and plans, seeking resources to implement plans, and influencing decision-making to achieve group goals and objectives (Nelson et al. 1990). Five main roles were clear from the case groups (Table 4.5), including: advocacy and representation; advisory; coordination; community leadership and strategic planning; and, information brokering and education.

Group roles at larger scales were, predominantly, community leadership through strategic direction setting, advocacy, and advice to government. State and regional groups operated

at a strategic level of policy development, communication, coordination and networking; and sought to influence policy and funding decision-makers. At smaller scales, including the subcatchment and LCD, group roles focused on operational actions within group boundaries. Roles centered on promoting sustainable agriculture, providing access to information, and forums for learning and sharing. Groups at these two scales were also undertaking roles beyond traditional Landcare activities to address off-farm natural resource management issues and non-agricultural issues (e.g. tax rebates, landscape scale nature conservation, roadside conservation).

Table 4.5 Roles of Groups at the Different Scales.

Group Roles	**State**	**Regional**	**LCD**	**Sub catchment**
Advocacy and representation	**X**	**X**	**X**	
Advisory	**X**	**X**		
Coordination	**X**	**X**	**X**	
Community leadership & strategic planning	**X**	**X**		**X**
Information brokering & education		**X**	**X**	**X**

Advocacy and representation

Actions of the group were focused upwards and downwards to other scales to support and advance regional natural resource management. Advocacy upwards, by influencing Ministers and other decision-makers, was a key role for the Soil and Land Conservation Council. This role involved developing policy on key issues, and promoting change through improved policies. The Council also represented community groups and State

natural resource management interests, and was the peak Landcare body and "voice" of community groups at smaller scales.

> It is the Soil and Land Conservation Council's role to develop policy for the Minister, and that includes clearing and drainage. [community person – State]
>
> We use [the] council in terms of either endorsing agency policy or sounding out ideas, [and for] new directions in land management. [government member – State]
>
> So, council being in one sense the de facto head of the community group representations - the representatives of community groups at the higher level. [government member – State]

In the current environment with uncertainty over its future, the Soil and Land Conservation Council took more of a listening and "rubber stamping" role, as opposed to actively developing policy.

> I'm not aware of anything the Soil and Land Conservation Council does apart from listening to reports … No, the Soil and Land Conservation Council hadn't led. You run stuff past the Soil and Land Conservation Council to make sure they're moderately comfortable and aren't going to object. [government person –State]
>
> Generally, the Soil and Land Conservation Council was noting - and rather than providing serious leadership and direction on those issues [drainage]. [government member – State]

As the nexus between State policy and the management scales of the LCD and subcatchment, regional groups (both regional partnership groups and community-led) were ideally positioned to advocate for community issues. Likewise, they could promote government programs and initiatives they supported. Advocacy was mainly conducted through the community leaders, specifically the Chairperson and regional coordinator, and entailed maintaining a high public presence of the group. These community leaders attended natural resource management forums across Western Australia, and represented their regional communities.

LCDCs have been active in trying to expand their role beyond traditional agricultural issues, and pursue off-farm natural resource management (e.g. lobbying politicians for tax

rebates). Both LCDC case studies had been involved in lobbying for changes in Landcare regulations. Representation of interests from communities within the local Shire boundaries enabled larger scale issues to be advanced through group action, lobbying, and working collectively with other groups.

Groups at subcatchment scale often lacked the time and resources to undertake advocacy roles, other than to implement on-ground actions to ameliorate land degradation. It was difficult for individual subcatchment groups to advocate particular policy preferences given their small membership and limited social networks.

Advisory

This group role is closely associated with the advocacy and representation role, but differs in that groups performed this as a statutory function. Groups at larger scales advised policy-makers, via community consultation processes, and directly through group presentations. They provided advice and information to LCDCs and subcatchment groups on matters of Landcare funding and regulations. In taking an advisory role to the Minister, senior officers, and Chief Executive Officers of State government agencies, the Soil and Land Conservation Council showed leadership and promoted community concerns.

> You're an advisory group to government … You're expected to show leadership … it's more influencing decision-making. [community member – State]
>
> Council should not be put in a position to coordinate and monitor projects. It was an advisory board only. [government member – State]

The distinction between the community-led groups and government-led groups was the advisory role to the Department of Agriculture and the Minister that was fulfilled by the latter. Community-led groups gave advice via feedback on draft policies or in submissions

to State and commonwealth governments. Regional groups were not implementers. This was a strong point promoted by participants.

> … rather see it always perceived as being an independent group that offers advice and advocacy and leadership etcetera. And is taken as such because of the values they offer in that region. They are a group that needs to be listened to. [community member – regional]

The lack of an advisory role for groups at other scales indicates their management focus, in terms of not advising Ministers and other senior personnel.

Coordination

Coordination was about "doing it better" and integrating activities across different groups. Groups sought to improve interactions between people from different groups to achieve greater efficiency. For the Soil and Land Conservation Council at State scale, this mainly focused on achieving coordination across the different State government agencies involved in managing natural resources. Regional scale organising was about connecting people in a coordinated approach. Coordination took place across the region and between numerous activities. The regional partnership groups used their projects to support regional community-led groups as a way to promote coordination and integration among state government agencies and the community (South-West Regional Partnership Group 1999). The Blackwood Basin Group's development, and use of the Landcare zone approach, was driven in part by the need to improve current coordination across the region.

> The Blackwood Basin Group is a coordinating group and not a doing group … the real value is influencing and coordinating outcomes, rather than trying to do outcomes. [government member – regional]

The restructuring of LCDCs to reflect subcatchment representation has enhanced their coordination role with subcatchment groups, and improved the management of local issues.

> Each member on the LCDC is a representative from the various [sub]catchment groups, so that those members can go back to their catchment areas and detail what is happening on a local level on the LCDC. Basically, the LCDC is becoming more and more, probably, in an overall management role. [community member- LCD]

Community leadership and strategic planning

Groups play a central role in the support and display of community leadership, and can help communities to deal with natural resource management problems. The Soil and Land Conservation Council provided leadership by supporting regional natural resource management, along with informing discussion on legislative reform and policies for LCDCs. Developing policy documents on local government best practice in Landcare and water management in the landscape (e.g., drainage and clearing), allowed the group to show leadership to communities. Support given by this group for regional natural resource management ranged from progressing regional dialogue, through to funding regional chairs' meetings, and acting as a conduit between regions and national Landcare decision-making.

Regional groups were frequently described as strategic groups operating in a strategic planning environment, and giving regional leadership to communities. The understanding at regional scale was *"the role is more strategic, it's more big picture … not allowed to be involved in operational stuff"* [community member – regional]. To accomplish these roles, groups sought to influence key decision-makers by promoting the interests of the group and showing leadership to decision-makers, communities, and other stakeholders. The roles were undertaken to secure resources (e.g. funds) for the regions, and achieve tangible outcomes through enthusiasm to bring about change.

The formation and implementation of strategic regional plans was seen as a way of improving people's understanding of the group's direction. The core role of all the regional

groups (both government-led and community-led) was to produce a strategic regional plan. Such a regional plan would support the other roles of coordination, advocacy, representation, community leadership and strategic planning, education, information brokering, and direction setting.

Subcatchment groups were actively engaged in strategic planning for biodiversity conservation and sustainable agricultural production. Subcatchment planning provided a local context that helped foster a subcatchment wide identity. Collective plans were implemented to produce subcatchment management strategies directing on-ground implementation at the farm scale.

> So we set priorities, and then it is up to each of us to go back and do their stuff on their own farms. [community member – subcatchment]
>
> … where their Landcare responsibilities were not only for their farm boundaries but for the catchment. So, their attitude towards Landcare as far as the big picture has changed. And that is because they have gone through the process of becoming and developing into a [sub]catchment group. So, as they have developed into a [sub]catchment group their responsibility of being part of a group has grown to the point where they are not just individual farmers. [support person – subcatchment]

A possible explanation for the absence of this role at the LCD scale is the lack of strategic planning undertaken by these committees.

Information brokering and education

Information brokering at one scale was often directed at raising education and awareness at other scales. For example, the Avon Working Group established the Avon Catchment Network with a central database and electronic network to deliver information on sustainable natural resource management to community Landcare coordinators and community members working at subcatchment levels (Jennings & Moore 2000). Also, regional groups, such as the Avon Working Group, actively support community Landcare

coordinators in their role as information providers to subcatchment groups and farmers (Jennings & Moore 2000). These regional groups do not collect the information, but act as transfer agents to provide the structures for knowledge building and education. As mentioned previously, the Avon Working Group was also trialling membership from the education sector. The outcome sought by the Avon Working Group was for more effective community participation in decision-making processes by informing and educating the wider community (Avon Working Group 2000). While at State scale, the Soil and Land Conservation Council did not take the role of information broker, but instead funded research on land management.

LCDCs were involved with subcatchment groups in brokering information as a means of coordinating Landcare actions. Groups at LCD scale fulfilled their statutory requirements by providing comment and feedback on behalf of the farming community to Agriculture WA, and promoting sustainable agriculture practices in the local conservation district. However, education for land management was often problematic. Except through local media, the LCDCs did not have the resources to undertake development or delivery of education packages on local environmental problems.

The information brokering role at subcatchment scale revolved around two main information sources: information on sustainable land management practices, and details on accessing funds via group grants and programs. Subcatchment groups were a forum for learning and a repository of information when they acted as demonstration subcatchments for other Landcare groups. Mostly, information brokering was for the sole purpose of improving the knowledge and practices of their landholder members that would be translated into actions at a subcatchment scale.

Roles of Groups at Different Scales

State

The Soil and Land Conservation Council's role was narrowly focused upwards to advocate and advise their Minister and associated government.

Regional

The regional groups played out a range of roles from strategic planning to education (Table 4.5). In comparison with other scales, they had the largest number of roles. Although community-led regional groups and regional partnership groups had different origins and functions, many of their generic roles were similar – strategic planning, setting direction, coordination, brokering, and promotion (c.f., Blackwood Basin Group 2000; Avon Working Group 1999; Blackwood Basin Group 1998; Central Agricultural Regional Partnership Group 1998; South-West Regional Partnership Group 1998).

LCD

At the LCD scale, the LCDC group roles had some similarities to the roles taken at regional and subcatchment scales (Table 4.5). The management roles of coordination and information brokering were features of the operational focus of the group, while advocacy and representation were taken to advance community issues at the strategic level of decision-making. LCDCs clearly share group roles with those at larger and smaller scales.

Excerpts from interviews with group members suggested that although there were periods of activity, the role of LCDC groups was one of reactivity. They served to fulfill legislative responsibilities in regard to soil conservation; including clearing and drainage. Several group members alluded to the redundancy of LCD scale.

> We're really like a post office with correspondence which comes our way … or commenting on things. [community member – LCD]

> Like most LCDs, they don't really do anything - apart from if they've got a gripe with something, or a letter has to be written. They don't actually have any activities as such. [community member – LCD]

Confusion was evident from community members with the introduction of the zone system in the Blackwood, including understanding the distinction between the roles, responsibilities, authority and functions of LCDCs and zones.

Subcatchment

Group roles at subcatchment scale were centered inward to building their own group's capacity to achieve sustainable natural resource management. The focus was on improving efficiency of actions through coordination, providing leadership guidance to communities, and improving the skills of participants by education.

4.7 Desirable Attributes of Groups

Five desirable group attributes were identified by respondents (Table 4.6). Concern for social justice, inclusiveness, representativeness, accountability and credibility underpin a number of these. There was tension between the desirable attributes calling for representative groups, and attracting the right representatives. Efforts to be inclusive of all interests may be restricted by seeking a particular class of individual with the right abilities.

Table 4.6 Desirable Attributes of Groups Roles for Social Sustainability.

Desirable Attribute	**Description of Attribute**
Representative	All interests are included and represented.
Attracts the right individuals	Attracts motivated and competent individuals.
Satisfies social justice	Provides equality through accountability and autonomy.
Credible, legitimate group image	Credible and legitimate image through democracy and representativeness.
External group linkages	Formal and informal linkages to increase effectiveness.

Representative

A key collective role of groups aspiring to participatory democracy is to provide broad representation of natural resource management interests, and to be representative of the community through deliberative participation (Moote et al. 1997). Many members were not satisfied all interests were adequately represented by the collective group, and were keen to improve representation. A number of group members recognized the limitations of current representation, either in the narrow representation base or poor skills of representatives. For regional and LCD groups, this poses a problem, given such groups promote a strong community base. If minority interests were represented, they were significantly marginalised. Often there was a single conservation voice amongst a collection of resource managers and production representatives. Membership was seen as being skewed towards production, dominated by specific sectors, or not representing urban interests who are part of the geographical area.

> The Avon Working Group is heavily focused on agriculture. All its community membership is agriculture based. That's reasonable because, it's the biggest industry in the catchment. But, it would be good to see it broadened a little bit … [it] covers areas of the rangelands, and it covers areas of the rural lifestyle too. And none of these areas are represented anyway. Mining is also a big

> industry within the region, and we have no involvement in that. [government member – regional]

Elite representation was often through cross-representation at several scales of decision-making, making possible the centralisation of power by a few key community members. This raised concerns over the level of procedural justice.

> Some people represented on sub-catchments, [including the] LCDC and zone and Blackwood Basin Group. [The] pro-drainage contingent mobilized, and one-side of the story [was] given, which is unfair. [community member – LCD]

At regional scale, frequent debate during decision-making allowed for the presentation of all views, delivered fairness to all parties involved, and sought to provide some procedural justice.

> There probably is [representativeness of interests], because there are some very, very diverse views amongst the whole group. Which makes for pretty rugged debate at times, and also allows most ideas to be put forward. [community member – regional]

Attracts the right individuals

> There is a whole wide spectrum of people making themselves available to come on community groups. Some people are well [intentioned], and offer nothing much else. Some of them have got certain skills, but can't work within groups. And then, you've got a real group of individuals that have been involved in a wide range of things that can bring some skill, and really have something to offer a group. To attract those people, you've got to start to get your identity out there. You've got to be seen to be reasonably well resourced. You've got to be seen that, if you come on here, you can actually achieve some things. [community member – regional]

There was a shift from attracting public participation in general, to attracting the "right" individuals who are familiar with group process, experienced in decision-making and had acquired the desired level of skill. The type of representation chosen determines, to some degree, the effectiveness of the group and how "good" decisions are made. To get effective representation, groups have to "market" themselves to key individuals who possess the

desired attributes. The group has to be perceived as successful in achieving outcomes to attract interested persons. Quotes made by group members illustrated the emphasis on groups appearing "successful" and the "place to be" (Moore et al. 2001).

> That was the other highly critical thing about Avon Working Group members, and going on the committee … they saw the Avon Working Group members as working really hard and having nothing to show for it. So they didn't want to be part of that team … [government person – regional]

Satisfies social justice

Social justice is about equality and equity – equal input with no power or resource imbalances, no preferential treatment and prejudices. The role of accountability assists in supporting notions of social justice. Accountability mechanisms allow for transparency in actions, accountability of actions, and ensuring rights are properly defined (Ife 1995). Notions of accountability, and what is required, are guided by participants' views of democracy.

Traditionally, accountability has resided within bureaucratic structures as a mechanism to hold those in positions accountable. Democratic accountability, as the link between bureaucracy and democracy, has been overlooked in the emergence of new collaborative processes. Now past definitions of accountability are viewed as too narrow, outdated, or restrictive to be applied (Weber 1999). How effective those accountability mechanisms are in practice is questionable. In an era of economic rationalism, the single direction of accountability is "upwards" to management, with limited scope for accountability "downward" to community (Ife 1995). Even usage of words such as "upwards" and "downwards" reinforces the dominant and hierarchical view of the "superior" manager opposed to the "subordinate" community (Ife 1995).

In the process of representation, a balance between equity, efficiency, and accountability is important, but has been poorly conceptualised (Smith et al. 1997). Scott (1998), in questioning the representativeness, accountability, and effectiveness of stakeholder forums, found these roles largely unaddressed. This suggests we have been accepting of the concept of representative organisations, without appraisal of key mechanisms that legitimise their role. The need for transparency in decision-making of interests represented is paramount, with representatives being accountable through transparent, and open decision-making processes. In practice accountability mechanisms, in the form of reporting and formal meeting procedures, exist through ad hoc communication channels. It falls on the responsibility of the group as a collective to support and progress social justice.

From the empirical evidence, accountability was perceived from four perspectives. Accountability was about:

1) gaining representative positions through formal community elections, as opposed to closed-group self-nomination processes. This is fundamental to the nature of representation itself, and not just accountability;

> Stand on your own two feet and be accountable. Go for elections. Don't just nominate yourself, - be voted in by your constituents. It was raising this whole issue of how they stand in the community, and how they look after themselves. [government person - regional]

2) downward accountability by representatives reporting back to and interacting with constituent groups;

> … need to have good connections … changed perspective with people on the Blackwood Basin Group and those on the land … feedback, the other way from the Blackwood Basin Group to LCDCs, and from the Blackwood Basin Group to sub-catchments. More time to put back into the community, and not selecting those power leaders. Awareness of the Blackwood Basin Group is very low in the community … feed more information, "voices" in sub-catchment heard in Blackwood Basin Group this leads to representation. [community member - regional]

3) accountability by members to their natural resource management group for their actions.

> It [accountability] was never bought up at the LCDC meetings. They were never brought to task about what they were doing. They were never asked if they were doing it as a member of the LCDC, or as a community person. And they never volunteered any information back to the LCDC. So all that lobbying that they did outside LCDC meetings … were never brought back to the committee. [community member - LCD]

4) accountability through reporting on project funding. Group action was predominantly directed towards the community, with formal accountability mechanisms to federal government. Financial accountability guarded against poor fund management, but also ensured policies were fully implemented.

One community member expressed the need for representatives to acknowledge and accept responsibility for their positions, and for accountability measures to be in place to keep the actions of representatives in check.

> With rights come responsibilities. And there needs to be that balance between control, either voluntary or enforced. The same balance between agency and LCDC members. [community member - LCD]

Accountability is important in environmental conflict. In particular, accountability back to the group by individual members is critical when actions are taken outside group meetings. Also, there is the accountability of government representatives to groups they are committed to, as opposed to supporting individual members. When accountability mechanisms were absent, this led to uncertainty over individual's intent outside meetings. At most scales, representatives gave verbal reports at meetings, but these were only summaries of their activities. For example, accountability at LCD scale was limited and prone to representation being seen to progress an individual's personal agenda under the guise of the community's collective good; especially when members did not report important events to their group.

Autonomy, as a concept within social justice, recognises meaningful citizen involvement and dislodges central control. The autonomy of regional groups, to design and manage their own affairs, namely their individual regional strategic plans, supported social justice principles by maximizing their autonomy. This allowed each group "to develop its own structures and programmes to deal with its own problems" (Ife 1995, p. 105), and account for variability amongst regions. However, autonomy may not often occur for various reasons. For example, the regional partnership groups were required to develop plans that aligned with the overarching State Sustainable Rural Development strategic plan and Agriculture WA's areas of core business.

The strong government involvement in regional groups restricted their autonomy. These groups were required to develop regional initiatives within federally determined guidelines. The assumption in these groups was that bureaucratic planners and policy-makers "know best" (Ife 1995). However, the ideal is for interconnectedness of communities, but circumscribed to prevent infringement on social justice. More importantly, autonomy by groups gave members the sense that government recognised that "*the community knows best*". Community-led regional groups were more autonomous than the government-led regional groups.

Credible, legitimate group image

> [The] make up of [the] board makes a difference in how it is accepted by the community. Composition stipulated, and moved away from being Ministerial appointments to allow communication both ways – using a process of being democratically elected rather than appointed. [The] community should be on all peak bodies. [community member – State]

This quote illustrates two points. First, for groups to be viewed as legitimate they need democratically elected members. Second, perceptions of representative structures may play

a role in attracting stakeholders to participate in decision-making, community acceptance of the group's decision-making outcomes, and subsequent implementation of plans. Community-led groups needed to present the image that they were representative of the community's interests, and were active in advocacy roles.

Representation based on community elections provides communities with the confidence that decisions have addressed community needs. There were calls by respondents to justify what they had to offer the group. This approach was viewed as an improvement on past methods; with greater fairness, flexibility, and more active representation.

> When the group first started, it was approached as co-opting people onto it. It wasn't any election process. So when we first got going, it was very much agency driven. We needed a group to manage a region, $4.2 million dollars from the commonwealth … so, it was a very biased way of obtaining membership … We've got a lot more flexible in our membership … We've now got a process of elections, and its up to the community to nominate and then elect their representatives … in the co-opting process. People we thought were good decision makers and participators in fact weren't … With the way we've structured with elections every year, it enables us to have good turnover, and that we're not left with non-performers for good long periods of time. [government person - regional]

For example, at regional scale respondents found it was important for community-led groups to have a credible reputation with government.

> From a farmer's point of view, they probably perceive that the Avon Working Group has no power. And, I feel that from a State government point of view they probably think a little bit along the same lines still. [community member – regional]
>
> [Credible image] Yes, from both directions, and I'm not sure which direction you need to go at first … I'm loath to say it, but probably almost from the government level. Because if you haven't got credibility with them, it doesn't matter how much credibility you've got with the community. You don't achieve anything. [community member – regional]

Group image was influenced by the level of government control in the determination of group membership. At larger scales, government used closed decision processes to direct the composition of groups. At subcatchment scale, although the government often initiated

and supported the formation of groups, they had no involvement in representation aspects. Government agencies had observer status only. Groups formed under legislation, such as the Soil and Land Conservation Council, are more likely to be subject to political influences. Such groups may be perceived as not independent of government, and are not given credibility due to their close association with government. Representatives on the regional partnership groups were portrayed as the "Minister's bunnies", due to the subjective selection of members by the Minister.

> It is a really fine line that you walk, because you can be labeled as being, as I have been, a quasi-agency person. Because I'm trying to explain some of the decision-making that occurs and the reasons that the decisions are made in that way … It happened to me on a number of occasions. [community member – regional]
>
> … trying to promote the benefits that can come to both farmers, individuals, and to Agriculture WA by having community representation … If we … have done more of that, we may have been able to attract more members. But, I think sometimes what happens is that time goes on, and then people start talking and "oh that's just Monty's [Minister for Primary Industry & Fisheries] group". [community member – regional}

To counter this problem of the community perceiving representatives "getting into bed with government", there were some representatives from government-led regional groups chosen by the Minister who did not support his political party. The competency of representatives on such Ministerial groups was never questioned. This acceptance suggested that the "right" individuals had been selected to achieve the outcome. The unquestionable acceptance of Ministerial appointed representatives on regional partnership groups may be attributed to individual representatives possessing strong credibility. The other explanation may be that while these regional groups were fundamentally government funded, initiated, and controlled, they were established and overseen by a democratically elected politician.

> No understanding of how he makes his decisions or anything, but we have members on our group that are most definitely a very different political persuasion to the current government. So, it would seem to me that in our instance, for example, he's been fairly open and accommodating to try and pick the people he thought were doing a good job. And he has taken advice

> from the group also … Maybe if it was just left up to the bureaucracy within [Department of Agriculture], you may get a very different result. [community member - regional]

External group linkages

Linkages across groups can assist in securing vertical and horizontal integration, and coordination and consistency of plans and actions. External linkages founded on cross-membership were frequent identified in the groups studied; otherwise connections were formed through members' personal networks. A valuable attribute at State, regional and subcatchment scales were connections to external groups to optimise on synergies.

> A lot of the work seems to be done informally, through other processes. As like XX is on this committee, and someone else will be on that committee. [community member – State]

> We've got people like XX … and now YY, so they're very much involved at the federal, State level in terms of what's now Natural Heritage Trust, plus delivery into the State. You've also got the Australian Landcare Council which ZZ sits on … we're able to bring influence to bear at that level, as well as how things are administered broadly across the agencies in the State [through government representatives]. [government member – State]

Across the different scales, communication and consultation with key external stakeholders occurred through individual efforts or small delegations of individuals. This mode of operation was preferred by members, and seen as an effective way of building up and maintaining the group's linkages.

> Boiled down to individuals within the groups doing that, rather than the group formally. Little deputations going from the South-West Sustainable Rural Development along to something. Although I think that happened with XX [Chairperson] and YY[Program Manager] on several occasions, but I think the more effective way was simply through the individuals. [community member – regional]

The criticism was leveled at other groups that such linkages were often poorly developed and maintained by community members. This was often blamed on the lack of resources and time.

A recognised strength of the regional partnership groups was their access to networks and linkages with groups; such as the Blackwood Basin Group, Avon Working Group, industry groups, and specialised production sectors. Group linkages and associations with other natural resource management groups through representation were also a factor in providing credibility.

> One of the things that I think is wrong with our lack of image at the moment is the fact that we're not linking with even the common-sense groups. If we linked with them at least, then we'd be linking with the leaders of Landcare that are out in the community. [community member – regional]

Desirable Attributes of Groups at Different Scales

Examination of group attributes in Table 4.7 reveals several interesting points. Attracting the right representatives was important at larger scales (Table 4.7). The community-led regional groups had the most expectations, all of which were not fulfilled. A credible group image was important at intermediate scales. As with the roles of individuals and associated expectations (Table 4.4), the expectations for and fulfillment of attributes was least at LCD and subcatchment scales.

Social justice was a concern at all scales. This suggested equality and accountability are important features for all groups, regardless of the form of democracy used in participation, and the scale of decision-making and organisational arrangements. Across the different scales every group, except the community-led regional groups, satisfied social justice concerns. This observation suggests possible problems with elitism at this scale, either in representation or delivering of accountability. Community-led regional representation may be masquerading as democratic in a situation of "justice of earned desserts" (Lane 1986), with representation based on status in the community.

The formation and use of external linkages between groups was a common attribute sought by groups at most scales. External group linkages were important for the State, regional, and subcatchment scale, because of those groups' funding and partnership needs, but absent for LCDCs. Another observation was a group's credibility and legitimacy was desired at the LCD scale, but not at the State scale. While both scales have statutory based groups, only LCD groups seek to be representative. This observation suggests that while statutory origins create some shared similarities between the LCD and State, they differ in the State group being a competency-based body and not established to represent the community.

Table 4.7 Desirable Attributes of Group Roles at the Different Scales.

Desirable attribute	**State**	**Regional**		**LCD**	**Sub catchment**
		Government -led	**Community-led**		
Representative					
Attracts the right representatives					
Satisfy social justice concerns					
Credible, legitimate group image					
External group linkages					

Light shade - attribute desired and present
Black shade – attribute desired and absent
Gray shade - attribute not mentioned

State

The three desirable attributes identified for groups operating at this scale were aimed at improving effectiveness, by providing representatives who are forging good linkages with

external organisations. Meeting social justice concerns was also a fundamental issue for the Soil and Land Conservation Council, given its involvement in committing funds and formulating policy for natural resource management. The lack of attention to attributes dealing with the representative nature of the group highlights the fact that the Council is a peak statutory natural resource management body, and does not promote itself as being a representative group. In the eyes of the members, the experience of the representatives and the group's statutory basis provide the credibility and legitimacy to the group. It appears to be an assumed attribute, hence it was not mentioned.

Regional

The large number of desirable attributes for regional groups may be due to the diverse range of roles groups have at this scale of decision-making. The other plausible explanation is that the emphasis on regional organising by the federal government has shifted the focus from subcatchment to regional scale, and accompanying this shift are greater expectations and needs on regional groups and their members. The large number of desirable group attributes reflects the significant interest in regions by communities and government, as a means of achieving natural resource management. Compared to other scales, decision-making bodies at this scale appear to have greater requirements placed on them, with respect to representation and the need to satisfy representative democracy ideals. Similarly, respondents identified regional scale representatives as requiring a large number of desired attributes.

There were some dramatic differences at regional scale between the two types of regional groups, and how well they currently satisfy the desirable attributes. Again, it was the government-led groups that appeared to perform better than the community-led regional groups in the number of desirable attributes present, which was similar to the situation for

the individual representative desirable attributes (Table 4.4). For the community-led regional groups, all five desirable attributes were absent. One basic difference was the regional partnership groups appeared better resourced through the support of the State government agency Agriculture WA. The community-led regional groups were, reliant on resources from the federal government.

> I'm wondering whether or not we should have actually employed someone with real promotional marketing skills to actually try to get out there and get the consultation process working in a more effective way … but that would then require extra resources, and people don't look on that as being action on the ground, even though it's important. [community member]

Community-led regional groups were the only group not satisfying social justice concerns.

> It is important that everyone has the opportunity to have their say in a non-confrontational, non-threatening, non-emotional atmosphere. That issues are [brought] about to the table, rather than personalities and judgements. [community member – regional]

Both the government-led and community-led regional groups appeared deficient in creating a credible, legitimate group image and developing external linkages. It was possible that the lack of two way communication and social networks may have contributed to these group deficiencies (see Table 4.4).

LCD

The desired group attributes at the LCD scale were representativeness of interests, social justice, and group image. This attention suggests the standing of these groups within communities was important. The LCDCs appeared to have few concerns regarding group representation in relation to regional scale groups. At the LCD scale, neither securing the right representatives or external group linkages was desired, suggesting these were not viewed as necessary for the group's tasks, which are very much local community-oriented.

Some respondents viewed legislation covering LCDCs representation as out-dated and predominantly production focused, and deficient in recognising biodiversity among other community interests. Other concerns were over the inclusiveness of interests, gender, and the length of representation. Some members on the other hand, viewed the representation role as adequate.

> We've certainly got a very diverse group. So, I would say that just about everyone in the community is representative, or has a representative on the committee to cover all aspects of the activities in the Shire. [community member - LCD]
>
> … such a broad representative group, yes. I don't believe there's ever been a time there wouldn't be a general cross section of the community there. [community member – LCD]

Subcatchment

This scale shared a concern for social justice with all other scales. This attribute was evident with individuals having equal input into decisions, and transparent processes of dividing up subcatchment resources amongst the interested participants.

> Everyone was involved. Only the people who didn't turn up, they were given notice. And if they didn't want to be there, then that was their problem. [government person – community]

A desire for external group linkages was shared with other groups across many scales. While it was missing, it was being actively sought by group members. The recognition of only two desirable group attributes at subcatchment scale may be explained from three perspectives. First, subcatchment groups may be completely satisfied with their group's roles. Second, the on-ground implementation focus of subcatchment groups may make other roles irrelevant at this scale. Third, direct participation and deliberative democracy at this scale make representation concerns unnecessary. Furthermore, the limited number of desirable attributes for subcatchment groups matched a correspondingly limited number of desirable attributes for individual representatives (Table 4.4).

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CHAPTER 5.

LEADERSHIP AND SOCIAL SUSTAINABILITY

5.1 Introduction

Current thinking by researchers and practitioners supports the need for developing better social organising suited for sustainable natural resource management. Leadership plays a fundamental role in improving decision-making as a central feature of social organising. Leadership is one of the key principles of sustainable development (Hartig et al. 1996) and is an essential element of social sustainability. This study shows that it is a core feature of organising for natural resource management at all four spatial scales.

There are many definitions of leadership (c.f. Hughes et al. 1996). Yukl (2002, p. 7) defined leadership as "the process of influencing others to understand and agree". Literature definitions of leadership include: individuals directing group activities toward shared goals (Hemphill & Coons 1957); leadership through a process of influencing activities of an organised group towards goal attainment (Rauch & Behling 1984); leadership by articulating visions, encompassing values and creating enabling environments (Richards & Engle 1986); and leadership by giving meaningful direction and purpose to collective efforts, and instilling willingness to expend effort to achieve outcomes (Jacobs & Jaques 1990). There are numerous factors that affect leadership, such as personal attributes (expertise, friendship, loyalty, and charisma), group features (group size, status differentials, cohesiveness and groupthink), and the physical environment (Yukl 2002). There is also a variety of leadership types used to categorise leadership, such as transformational, transactive, participative and communicative.

This chapter starts by discussing the connection between leadership and social sustainability. To understand leadership from the perspective of participants, I then present the meanings of both individual and group leadership as constructed by the case study respondents. Next, the six types of leadership taken and created by individuals and the identified desirable attributes of leadership determined from the empirical results are described. Following this, group leadership and the desirable attributes identified by respondents are addressed.

The Contribution of Leadership to Social Sustainability

Social sustainability is important for advancing sustainable development through social institutions and structures. Therefore, leadership as a "social relationship" (Gray et al. 2002) needs to contribute to social capital, decentralised decision-making, strong participatory structures, and promotion of local governance[1] – all foundations of social sustainability (Purdue 2001). As discussed in Chapter 1, central to the concept of social sustainability are issues such as participation, democracy and fairness. In theory, the principles of equality of persons and equality of rights are progressed through leaders upholding democratic ideals (Theophanous 1994). Leadership supporting democracy also maximises self-determination. The concept of enabling others to determine their own goals supports Jean-Jacques Rousseau's argument against autocracy and the oppression of a citizen's ability to determine his or her own destiny (Theophanous 1994). Rousseau was an eighteenth century French philosopher who championed democracy and opposed the use of leadership to rule over people. He championed the principles of equality and self-determination. He defined democracy through one criterion; as a social group collectively

[1] Local governance is defined here as a partnership between State and non-State (community) actors with no formal coercive powers. Local governance gives attention to how power is exercised, as opposed to who possesses power, and implies decision-making is increasingly "bottom-up", and driven by the will of individuals and groups rather than by the state (Herbert-Cheshire 2000).

making a determination of their own will and resulting in more people participating as a collective to determine shared goals and objectives (Theophanous 1994). For democracy an essential element is leadership capital, which is comprised of three factors: the competence, integrity, and capacities for performance that leaders may have or bring to bear on social organising (Renshon 2000).

Social sustainability is advanced through the "right" type of leadership. Such leadership offers a supportive group environment by establishing trust, creating a positive learning experience, and engendering group cohesion. In turn, this builds the foundations of social institutions that maximise social sustainability. This type of leadership also has a positive influence on group dynamics, and is not detrimental to the quality of decisions. However, not all types of leadership support notions of social sustainability. For example fascism is one authoritarian approach that opposes democracy and liberalism. Most political leaders are reluctant to devolve power in a way which would actually lead to self-determination. Ideally "leaders should be committed to a broad-based consensus process rather than a top-down autocratic one. Leaders should actively help move the process forward but they should not seek absolute control of the process itself" (Hartig et al. 1996, p. 35) or exclude the interests of the less powerful. For Gray et al. (2002) the question is when does leadership become elitism and leaders become powerful at the expense of the interests of others. Effective leaders are best described as those who "pursue the common vision internally within the stakeholder group as well as externally in their own constituencies", along with accounting for interrelationships, committing resources, forming external linkages, and influencing others (government, industry, community) to participate (Hartig et al. 1996 p. 35).

Community leadership supports sustainable development through community involvement. Leadership that is empowering involves ensuring access and equity in group decision-making processes for all members. This leadership improves decision-making processes and relationships between individuals and groups, with associated benefits for social sustainability. Achieving the goal of social sustainability entails leaders negotiating outcomes and collaborating on behalf of other citizens. Sustainable organising is through shared and delegated leadership involving communities, and using partnership and self-determination. The actions of these communities are being aided and supported by State government agencies, and rural community capacity building and leadership building programs (see Gray et al. 2002). Gray et al. (2002, p. 3) describe the "plethora of government sponsored leadership programs" as a "stimuli to the building of community capacity".

Leadership contributes to social sustainability in a number of ways, such as assisting individuals and groups to gain mastery over actions, building social capital through knowledge and interactions, and improving competencies and capacity. In progressing sustainability, leadership and leadership development should support democratic and inclusive processes which assess legitimacy of interests, compared to traditional top-down autocratic and exclusive approaches to natural resource management (Gray et al. 2002). With the former, feelings of empowerment are mediated through a sense of collective identity and satisfaction of group performance that is derived from charismatic leadership that is innovative, outward influencing, and inspirational to other participants. Fawcett et al. (1995) outlines community leadership facilitating empowerment, by an interactive, cascading process of empowerment from funders and community groups, working together to enhance community leadership capacity, in turn facilitating the empowerment of individuals and groups in communities (Fawcett et al. 1995).

Social capital that is enhanced through participatory practices assists the emergence of new leadership and leadership capacity (Pretty & Frank 2000). Similarly, social capital is created through leadership and the subsequent building of networks and deepening of on-going interactions. Robert Putnam's (2000) book *Bowling Alone,* on the decline of social capital in America over the past half century, explicitly ties social capital to community leadership. He notes that social capital allows citizens to resolve collective problems more easily through productive sets of relationships among people. Social capital is based on common expectations, shared sets of values, and a sense of trust that forms through strong leadership. Where there are conflicting values and a significant lack of trust, social capital is weak (Beem 1999).

Leadership enables capacity building by enhancing the community's ability to pursue chosen purposes. This leadership seeks to influence the relevant behaviours of decision-makers and community members (Fawcett et al. 1995). Cooperation is fostered between participants from a common sense of purpose attained through good strategic communication. This leadership drives capacity building by such actions as enhancing group structure and capability.

5.2 Definitions of Leadership

Constructed Meanings of Individual and Group Leadership

Respondents identified leadership as providing the group with motivation, innovation, forward thinking, direction setting, and the human resource capacity to achieve successful outcomes. For individuals, leadership was also a process of personal growth (confidence and commitment), and increasing one's environmental literacy. The most productive leadership development for community leaders was to "travel along the spiral of

experience" (Hughes et al. 1996, p. 23), through observation, reflection and action. The following is illustrative of comments by many community leaders.

> I've developed quite a lot of skill in decision-making processes, and I think it's just from experience. Learnt a lot of caution … I've learnt to listen to the debate a lot longer than I would have done when I first came in. I was always quite clear on what had to be done and said so the first minute of the debate and often didn't look or listen at the other issues. So, I've learnt to do that a fair bit. [community member - State]

Leaders in their ideal form are honest, forward thinking, and inspiring (Hughes et al. 1996). Generally, community leaders in rural communities belong to a medium to high socio-economic stratum, are educated, articulate, male and long-term residents of their localities (Shucksmith & Chapman 1998). As Desai (1996) has observed, community leaders are also recognised as being more highly motivated than most of the community they represent, with established channels of communication and good networks[2] of contact with knowledgeable and influential people. Formal leaders in the case study groups were executive members (e.g. Chairperson, Vice-Chairperson, secretary, chairs of committee groups), either elected by other group members or Ministerially appointed. Informal leaders were those individuals who motivated others through their ideas and actions. Both types of leaders championed causes and had a willingness to pursue issues outside of groups, devoting time for the benefit of the group through such activities as establishing external contacts.

formal leadership

> … becoming involved in the actual organisational side of it, taking office bearing jobs and things like that. Maybe trying to encourage others, or sharing their knowledge with others, and trying to encourage them … A lot of Landcare things are a bit like that, aren't they? Trying to raise people's awareness of what is going on [community member - LCD]

[2] Networks as previously described are informal groups of individuals who have established relationships and include formal and informal identities (Roseland 2000).

informal leadership

> I think leadership is a funny thing. They appoint leaders, Chairman, Chairpersons and secretaries, but then you have other people who are not appointed to those positions who quietly do things, and are actually playing a leadership role without it being formally acknowledged. And I see people … increasingly over time, lead that group without any formal position. If he's given the information and gains a better understanding of the sorts of issues … he will actually start influencing those. And in doing so, if he's respected within the community, he will be a leader, but he won't be appointed to a position [external person - subcatchment]

> I don't think the group would have worked as well without having people like that in the group. Because a chairman is a little bit limited in how much they can see. I think YY understood, really, the whole catchment process very much more quickly than everybody … I don't think XX and I would have steered the group as well as it has been without people like YY there. I think that's probably important for any group [community member - subcatchment]

There was no recognisable difference in support for elected or appointed leaders. This lack of difference contradicts the view by Griffin (1999) that elected leaders may garner greater support than appointed ones. The Soil and Land Conservation Council and the two regional partnership groups had appointed Chairpersons, who were strongly supported by their fellow members due to their good leadership capacity, integrity, and competency. The Chairpersons were seen as legitimate leaders because of their capabilities. What was important for leaders was for them to demonstrate competency, and to act credibly by supporting democratic principles of accountability, fairness and equity, negating any concerns regarding their means of obtaining office.

Respondents described leaders (both formal and informal) as possessing a number of characteristics. A leader: had a history with the group; was a strategic thinker; was respected and trusted within the group; was a good communicator; had a flexible and open-minded approach; provided external influence and direction; and supported democratic and fair decision-making.

> *Strategic thinker* - some of them are very strategic and they are driving the group. They have a definite way of doing things and know where they want to end up. [government person - State]

> *Motivator and respected member* - … being able to help others. In meetings it is XX, the progressive farmers in the upper catchment, motivating the others in the catchment. Carrying the others to a certain extent and helping others. XX is the motivating force in the group. Group members respect him and his knowledge. He has got the bigger picture. [government person - subcatchment]
>
> *Active participant and initiator* - XX … He leads by example, and despite our personal differences I admire the man. Leading by example has cost him a lot of money. [community member - subcatchment]
>
> *Networker and promoter* - I think because of XX's pressure and forthright [view] that we are a progressive catchment because of his leadership, which has been very important to us due to his contacts with [the] hierarchy in the Ag Department and everywhere else. He knows everyone involved and who to contact and who not to. And I think he has got results, that without him, someone of his stature at the top, that we would not have gone anywhere near as far. So, I feel that we have a pretty strong catchment group at the moment [community member - regional]
>
> *Committed and dedicated individual* - leadership would have a lot to do with it. The strength of the leadership and commitment of the leadership. If the leader wasn't committed then the group would of just gone their separate ways. But, because the leadership has been committed and strong then people are prepared to follow that leadership [community member - subcatchment]
>
> *Group's spokesperson* - XX spoke up and I think everyone values his opinion and his comments very highly. So, he has always really been a real driver and spokesman for the group, and whether that is a good thing or not, I'm not sure. In a lot of ways I think that's probably a bad thing. But it's good that they do have [someone] who they can think of like a type of father figure or a model, and they will stand behind him [government person - regional]

Others have described leaders along the same line as "cheerleader-energizer, diplomat, process facilitator, leader, convener, catalyst, and promoter" (Wondolleck & Yaffee 2000, p. 178).

Community leaders were often the progressive individuals. They adopted new practices and undertook sustainable agricultural management. They belonged to a Landcare oriented family, and held membership in other natural resource management decision-making forums. These leaders frequently had a strong underlying natural resource management ethos that was integral to taking on leadership roles within groups.

> He's got the drive. I wouldn't take it on. I'm interested, but Landcare seems to be their life … The guys at the top are very dedicated to Landcare … They've held the group together with their enthusiasm … From the beginning he knew what the whole ideas was - more of a priority in his life than in other farmers

> … There is a core of really Landcare oriented families in the group, which has been the key to its success. I think really there are probably three or four families in the group that are Landcare oriented, and they've had a major part to play in its success. [community members - subcatchment]

Leadership by groups was evident in numerous forms. These were by actions of providing guidance and support to community groups, giving direction and advice to policy-makers, and generally empowering individuals, groups, and communities to make informed decisions, as illustrated by this comment.

> Soil and Land Conservation Committee facilitated the process and shown [sic] leadership role … So leadership is also taking stuff back to people and the broader community … I think that's been really good [what] that Soil and Land Conservation Committee has done recently, and that's support the chairs of regional organisations. That's a really important thing … so in that respect, in some things - we've shown leadership. [community members - State].

All the case study groups expressed an aim to be recognised leaders in their area. This aim was often driven by the desire to gain a competitive advantage over other groups for funds and resources. Leadership by groups, especially at large scale, was about being seen as credible and having achieved a credible outcome. This motivation was to show federal government funding agencies the leadership and ability to deliver outcomes. For example, regional groups acknowledged the essential value of possessing a credible image to influence policy-makers, funders and communities. A credible regional strategy was important for setting the overarching direction for their region and directing community actions.

5.3 Types of Individual Leadership

Six individual leadership types were evident, including single dominant, delegated, external, government supported, shared, and passive leadership by example (Table 5.1). These types spanned formal, executive tasks, through project management to informal leadership activities.

Table 5.1 Summary of Individual Leadership Types at the Different Scales.

Leadership Type*	**State**	**Regional**	**LCD**	**Sub catchment**
Single dominant		X**	X	X
Delegated	X	X		X
External				X
Government supported		X		X
Shared	X	X		
Passive			X	X

* Individual leadership types were determined from the empirical data.
** Single dominant leadership occurred in one of the community-led regional groups.

Single dominant leadership

In this leadership type, one individual, with little delegation or sharing amongst other members, undertook the majority of the group roles and responsibilities. This leadership type can not, however, be described as being autocratic, because the leader did not make decisions without first asking the opinions of other group members. It was only evident at smaller scales of sub-catchment and LCDC, and in one group at regional scale. One participant described this leadership type as a "dictatorship".

> It is a bit of a dictatorship maybe … really dominated I think by XX [community member – subcatchment]

The exception at regional scale was a community-led regional group that had a strong leader who was an active influencing agent at State and federal levels of government. As the founding Chairperson, this individual acted in a leadership role for several terms during

which time there was little interest by other group members to take up the Chairperson position. Otherwise, leadership at larger scales was predominantly based on a shared organisational approach, which is discussed later.

These dominant leaders belonged to these smaller scale groups formed from “grass-roots” action, often through the initiative and energy of these charismatic individuals who had a strong Landcare ethos mixed with a prominent community status. During the formative stages of a group’s life, and later as the group struggled to establish themselves, such leadership may have been reinforced by the success of the group. Single dominant leadership appeared as a strong style that assisted in developing greater group cohesiveness, but in certain situations further entrenched environmental conflict.

Numerous interviewees commented on the presence and impact of a single dominant leadership approach, in terms of organisational process, group development, support of new leadership, and empowerment of other individuals. Leaders using a transformation approach allowed them to be strong role models for other members, but they were strongly focused on their vision at the cost of being what Northouse (2001) calls elitist and anti-democratic. Single dominant leadership was not always dominating. As Northouse (2001) explains, by playing a strong role in creating changes and advocating new directions, this gives others the impression the leader is acting independently or placing themselves and their views above others.

Strong leadership, however, was recognised as having negative aspects. For example, strong leadership by a single individual had the potential to negatively affect future potential leaders. The result of dominating leadership was the disempowerment of

potential alternative leaders, and the presence of power inequities between community members.

> I think the group has got strong leadership; which can also be a downfall if one particular person is too dominant. They may leave a bit of a void for other people [community member - regional]
>
> They have a very "top down man" approach to things. Even though they do have skills in the group that they should be using, but they are not. And that is something that I am always trying to bring out in them. They are definitely driven by whatever the chair wants. And so it made it tough at times, because if the chair did not want to do it, it made it hard to get the track around to a different angle … only had one leader, and that was pretty tough to deal with. Because whatever XX said went … I think there is a lot of other good leaders in there, but not prepared to stick their hands up [government person - subcatchment]

Delegated leadership

Delegated leadership involved utilizing group members with experience or interest in specific areas to distribute workloads. This type of leadership was a feature of most scales of organising, excluding LCD (Table 5.1). A possible reason for its absence at LCD scale may be the lack of resources for implementing actions stymieing such leadership. Alternatively, the group's management role in natural resource management negated the need for organising to undertake new projects through delegated leadership. The majority of activity undertaken by LCDCs occurred at group meetings, with little or no outside actions, other than by the Chairperson or community landcare coordinator.

Delegated leadership relied on executive committees, sub-groups, and working parties. It aimed to increase organisational efficiency and progress actions towards implementing outcomes. This form of leadership style worked effectively in situations where a level of trust existed within the group, and responsibility was devolved to a core group, where the core group was comprised of individuals with expressed interests and expertise in the discussions. Generally comprised of multiple interests (government, industry and community stakeholders), these arrangements built greater capacity within groups to reach

solutions in shorter time frames using fewer resources, and allowed the emergence and fostering of leadership skills by other individuals. It provided a forum for a smaller group of individuals to discuss issues and ideas without slowing or frustrating the process with detailed discussions over minor points. An advantage of delegated leadership was its ability to utilize leadership to function outside of formal group meetings. Drainage reform relied on such an approach. Although the State Salinity Council, under the auspice of the State Salinity Action Plan, had primacy over drainage for salinity management the Soil and Land Conservation Council facilitated the process with a working party reporting to them.

An example of delegated leadership by a community-led group was the Avon Working Group establishing a sub-committee with a combined government-community committee membership to progress development of the regional natural resource management plan. The community individuals on this sub-committee, although low in number, were either recognised leaders within the group or gained more prominent leadership status through their involvement. Devolving leadership to the sub-committee and its members showed a degree of trust for, and gave power and responsibility to those members to develop the draft plan. Use of delegated leadership made it possible for the plan to be developed within a short time frame, while reporting back to the main group. It also eliminated the commitment of extensive resources by the whole group.

> The sub-committee are the high level group members that know exactly where they're going, and the purpose of the regional strategy etc. And they work really well together, and they tend to support each others' thinking, while they also debate each others' thinking they do, in the end, come to some sort of agreement. … debate the issue but don't jump off and be angry about it. Let's agree on something and work on it. And I think that forming that group has been the best thing that this group has done, really, in that we've been able to move on. If we ended with a stalemate from every meeting, I think the whole group would be frustrated by the process and it would die [government person – regional]

> When we first started, we attempted to work with the whole of the XX [group] in putting the strategy together. It was very clear that some members were showing high levels of frustration in that process because of the continuous questioning … so we moved to a sub-committee approach which has been

> very, very effective. It has been able to progress that plan very well.
> [government member – regional]

To advance issues outside of normal group meetings, sub-committees of group members were set up by the community-led regional groups on a regular basis. While the government-led groups did not have established sub-committees along the same lines as the community-led groups, they often had delegations who would undertake to act on the group's behalf. These select members had expertise in the area of interest, such as land-use planning.

Such sub-group structures were also of significant benefit at subcatchment scale in assisting in the development of specialised projects to deal with land degradation problems across the subcatchment. They had a two-fold advantage of allowing group members to pursue areas of interest, and in delegating leadership to group members to develop greater leadership ability.

External leadership

This type of leadership was only apparent at subcatchment scale, in one group (i.e. Wallatin Creek Wildlife and Landcare Inc.). External leadership was leadership by a scientist and non-member. Provided with this leadership, the group then took control of the issue, and the external leader's roles shifted to lending assistance to help the group achieve their desired outcomes. For the Wallatin Creek Wildlife and Landcare Inc. group, a Commonwealth Scientific and Industrial Research Organisation scientist provided external leadership through being an "educator" and disseminating scientific knowledge, a "motivator" by raising community awareness of their landscape, and "enabler" by reinforcing individual's conservation values (Table 5.2).

Table 5.2 Influences of External Leadership on Wallatin Creek Wildlife and Landcare Inc.

Leadership Input	**Outcomes**
Providing knowledge	Knowledge influenced future direction, activities and actions of the group
Raising awareness	Increased enthusiasm and motivation for conservation Provided a real sense of direction and aim
Stimulating community initiatives	Establishment of group wildlife register for the catchment New interest in documenting what is in their landscape and sharing local knowledge
Attending to broad scale issues	External person acted as trigger for group to look at broad scale issues beyond subcatchment boundary
Internalising and reinforcing conservation values	Nature conservation values of members were reinforced and supported through scientist's valuing of biodiversity
Identifying new opportunities for collaboration and partnership	Group had greater ability to seek out new partners Greater confidence to engage and work with scientists and empowered to interact with new contacts

Source: Jennings and Lambeck (in prep)

External leadership was made possible by the long-term links with an external organisation, specifically a key individual, who had a significant level of influence and impact on the group's direction and activities. This scientist's leadership was important in getting the group to think more strategically, to articulate their individual intentions to support nature conservation, and to gain a greater understanding of the issues and the options available to the group. Most significantly, it gave the group access to a network of people, organisations, and future opportunities. The downside was that it relied on external leadership being adequately resourced to invest in community engagement.

> The expectations of the group are not realised because people can't deliver … The Commonwealth Scientific and Industrial Research Organisation - Wildlife and Ecology have not been able to deliver what they first set out to … agencies and the government groups let themselves down, as well as the catchment down, by not being able to realise that they can deliver or can't deliver [community member – subcatchment]

Government supported leadership

Both government supported leadership and external leadership seek similar outcomes. These outcomes include building local commitment and capacity for sustainable natural resource management by developing community leadership on certain issues. Their similarities are based on a process of influencing an organised group towards accomplishing shared goals. Government supported leadership differs in that individuals were from State government agencies, they were often group members, and had a long-standing relationship with the group.

Although State government agencies were involved in aiding groups in decision-making at all scales of organising, this leadership role was most evident at regional and subcatchment scales. This reflected the strong focus by State and federal governments on regional and subcatchment delivery of services for planning and management of natural resources. At regional scale, State and federal government agencies were leaders in the early stages of regional planning, by providing process leadership through a structure that allowed progressive community leadership to emerge. For example, State government assumed responsibility in the Avon Working Group regional strategic plan for managing the logistical steps in the process and writing the first draft plan. This assistance fostered community understanding, enabling them to take an active leadership role. Wondolleck and Ryan (1999) describe such government agency participation as playing an essential role in the triggering, functioning, and progression of the decision-making process.

> The natural resource management plan - the germ of the idea came more from the [government] agency in seeing the need to have one. And they encouraged the XXX group to participate which they did. And the reason behind it was to ensure that what scant resources are available that they are put into place in the most effective way possible for the region … initially it was driven quite strongly by Natural Heritage Trust. [government member – regional]

> For example, last December we came with a structure for the strategy and the community did say "yes" we agree with that. But really, that was a structure that agency was pushing. Then, in January, after they had time to think about it, they decided that it was not a structure they wanted. Even though I had progressed in nearly finishing the strategy for them, they decided no, that's not the way we want to go. We want to go this way … more and more it will be directed by community rather than agency saying this is what needs to be done. [The] community that says, the community telling us the direction it should be taken … it's [leadership] developing that way that it is now shared. [government person – regional]

A similar series of events occurred at the subcatchment scale, with the State government agency, Agriculture WA, servicing select focus subcatchments. The role of State government agency persons was to provide a process; essentially a series of steps through which the group would work to produce a final subcatchment plan for landholders to implement at the farm scale. They assisted the group by gaining their commitment to working towards a collective plan and in writing the plan. What eventuated were the community members taking a stronger and more involved role in the process. In the Fence Road Catchment, during the process community members identified problems with the process and raised issues, often challenging government persons on the validity of their plans and approach, and starting to be vocal in how they wanted the process to occur and the outcome they sought. Leadership by government at the State and LCD scale was absent, probably due to a number of factors. At the LCD scale, State government did not have a visible or active representative role and, as discussed previously in Chapter 4, invested few resources in maintaining strong links with communities through these groups. At State scale, the make-up of the Soil and Land Conservation Committee with competent community leaders made government leadership unnecessary, and may have resulted in inter-agency conflict if one agency had tried to take leadership.

Shared leadership

> So, we shared the leadership role. We shared the role, and I think that is one of the significant successes of the Blackwood. It's been prepared to share the

> leadership. No one [community or government] has ever dominated. [community member – regional]

Shared or joint leadership was based on a shared governance philosophy that builds on the concept of participation and shared vision, with the expectation that leadership would result in better outcomes. The quote above illustrates how the Blackwood Basin Group had adopted a shared community-government leadership approach within the group. The Blackwood Basin Group was an example of two leadership types occurring simultaneously within a group, because the single dominant leadership was evident through the Chairperson who also supported the shared leadership approach with government.

This type of leadership is a move towards a higher level of empowerment, accountability, and partnership in decision-making. In this study, shared leadership had a partnership/collaborative basis, while government supported leadership had government as initiators, funders and leaders with the community following. In shared leadership, government persons acted to facilitate and support community leadership through directing and prompting ideas. While the direction of government action may not parallel those of the community, it does assist communities to realign their plans to shared priorities and ideas. This results in a shift in control and leadership from government to the community, with government adopting a "reflexive" role of observing, questioning and challenging the community.

> Early on we had a lot to do with it. We were showing them a lot and driving them a lot … Hopefully, with my input, we got to pushing them down a road. Not so much as a pusher. I think I am more of … I sow seeds and give them hints and get them on to things. In the background, subtly driving them along. [government member - regional]

> Sometimes we get agency people who are strong drivers. They probably don't always drive us in the direction we would like to be driven, but they are strong drivers. But really most of the members have equal push. [community member – regional]

> It's developing that way, that it is now shared [leadership] … more and more it will be directed by the community rather than the agency saying this is what

> needs to be done … the community telling us the direction it should be taking … I'm still leading in that, I'm still questioning what they're doing, and I think that's a healthy thing. Otherwise they'd be just happy with a broad outline, and I think a regional strategy needs more than that. [government member - regional]

Leadership was also shared by strong community leaders within the same group. These leaders, whether community or government agency members, would challenge each others' decisions and ideas, thereby seeking to improve or validate a course of action to be taken.

> We've always developed strong leadership focus there. And the majority of the members there, especially the long term ones, are all leaders in their respective districts or their fields … That's been one of the strengths. And the fact that they've been able to, not always, to be in total agreement. But we've been able to get them to accept a compromise or go on. [community member – regional]

Shared leadership occurred only at larger scales of organising, and was facilitated by relationships of trust and respect between the community and government members. Individual personalities established a common purpose, understanding, and a good working relationship. For example, a history of working together with some prominent successes (e.g. policy on protection of remnant vegetation) and good relations between community and government members enabled the State group to operate through a shared leadership approach. The absence of shared leadership at LCD and subcatchment scale was undoubtedly and influenced by the type of government representation and level of involvement at these scales. The service type relationship between State government and communities at the subcatchment scale did not seem to engender a joint leadership approach or basis for shared work.

Shared leadership functioned because community and State government agency members recognised that each contributed from their areas of expertise and knowledge, and that no one party held all the information or answers. In some areas government were the key

leaders and information experts, but in areas pertaining to natural resource management issues affecting communities, or communities affecting government operations, or natural resources, community members led and government followed. For example, community leadership was evident in the identification of the drainage problem, namely the issues of contention (lack of technical information, insufficient feedback on drainage approval decision, drawn out administrative process) and suitable solutions. One community interviewee mentioned the value of government agency personnel expertise in natural resource management, because of their daily work in dealing with policy and project information. Another interviewee viewed the process as the community leading the way by publicly stating the problem and seeking government action to address the administrative deficiencies of the drainage approval process.

> There would be no drainage issue if the community wasn't making clear statements, "we want this direction", and government's trying to catch up. We're playing catch up … It's not leadership [by government], it's fellowship. Government's still following. Community's been demanding this all along … tell us what your criteria are, tell us what the procedure is. [government person - State]

Passive leadership

Passive or "indirect" leadership was characterised by individuals directing or informing group discussions and activities in subtle ways.

> even though they don't hold positions within the group, I suppose they really are the movers and shakers within the group. [community member - subcatchment]

Passive leadership was a role played by individuals who were interested in providing direction and information, but for personal reasons (confidence, time constraints) did not want to commit to any formal leadership role. Or, they were very active farmers on their own property integrating Landcare into production practices, were leaders within their own communities, and involved in strategic decision-making at a larger scale. Their role, as

observed in group meetings, was as a respected member who sought to subtly influence and direct other members by developing individual and group awareness and understanding, essentially building others' capacity to make informed decisions.

Leadership at the subcatchment and LCD scales were typically "passive". Leadership by example was typical by those individuals who were the first to implement new practices. Land management practices that produce early visual changes at ground level were suited to this form of leadership. A sharing and learning culture amongst landholders was prominent at subcatchment scale, and assisted in effecting change. Group members would seek out leaders in their area, often individuals from their subcatchment group to learn from.

> I've always felt that we must lead by example rather than tell people. Otherwise, if you do that, if you talk about it too much, it will turn a lot of people off. So, I prefer to take the quiet tact and just do it and then if people are interested, they will ask [community member - subcatchment]

Individual Leadership at Different Scales

In this section the individual leadership types are compared across scale, and features that were novel or unusual at each scale are highlighted. Each leadership type was generally apparent for only one or two scales, except for the dominant and delegated leadership types which occurred at three of the four scales (Table 5.1).

State

The two types of leadership occurring at State scale were delegated and shared leadership (Table 5.1). They existed within a functional, developed organisational setting where individuals showed respect, trust and understanding of other group members. Leadership by the chair of the committee was observed as democratic in ensuring all members had equal status, freedom to speak, and a cohesive and collective vision. This decision-making

environment made it possible for the group to show leadership to communities, other natural resource management groups and the Minister, even if limited and in the presence of several situational constraints. Leadership was expressed by individual members within the group, the group as a whole, and by their Chairperson who had cross-membership in other natural resource management decision-making forums at State and national scale. The Chairperson was a very important link to other groups, brought in relevant external information, and provided a window of knowledge across several scales in an empowering way for other group members. Formal leadership in this way enabled key networking and communication linkages to access multiple scales of decision-making. This leadership was not autocratic, but sought to inform and act for the collective interests of the group and wider communities.

The use of small working groups comprised of group members, supported by government policy officers, allowed key issues such as drainage reform to be pursued effectively and in depth with a bimonthly meeting schedule. Delegated responsibility to work through the drainage issue allowed members to show leadership in specific areas, and gave community representatives a chance to enhance and apply their understanding and knowledge. To attain social sustainability at this scale through leadership necessitates leadership arrangements that provide democratic leadership and delegation of leadership roles. In this study, all members were empowered through equal standing, and had a respected “voice” in making decisions. Individuals with expertise in specific areas have the opportunity to lead and direct decision-making to produce sustainable decisions reached through fair and equitable processes.

Regional

The leadership types identified at regional scale included: single dominant, delegated, government supported and shared leadership. The later two types were often linked with government actions providing the foundation for the development of community leadership, partnerships and group "enabling".[3] Regional partnership arrangements sought to increase community responsibility and commitment to natural resource management, and promote shared government-community initiatives for both government-led and community-led regional groups.

Formal leaders in the community-led regional groups were public figures engaged in different forums as spokespersons for their respective groups, and viewed as the "face" of the group. Within the groups, these leaders used their position to inform and mediate group processes. Leaders were expected to act democratically, never using their position or acting in a manner to influence group decision-making in an undue way to reach a decision they as an individual wanted. The leaders from government-led regional groups developed their leadership as a "web" on a single level, while dominant leaders in community-led regional groups appeared to use a hierarchical structure comprised of a two tier system of power. The first and most prominent tier was the Chairperson, and below this was the elected executive committee that functioned as the second tier structure of power.

Generally, leaders operated to produce democratic and open processes inclusive all of members, as opposed to allowing personalities and personal differences to dominate. Leadership at larger scales generally appeared to allow access to and participation in processes that were socially just and fair. One interviewee described an example of this leadership style.

[3] "Enabling" is organisation building that identifies requirements, sets priorities, specifies standards of activity, and identifies the best way to meet set standards.

> My leadership style is that I think it's important that everyone has the opportunity to have their say in a non-confrontational, non-threatening, non-emotional atmosphere, which issues are bought to the table rather than personalities and judgements. So, I suppose my style is that I'm happy for the rest of the group to have as much involvement as they wish. Certainly not autocratic in any way whatsoever, and I personally think that the more people that feel that they're having a real input into the group the stronger the group is. [community member – regional]

Larger scales of decision-making, such as regional and State were the key arenas for senior government persons and community leaders. At this strategic level of thinking, as opposed to operational management level, members were able to be part of the "big picture" planning. This included developing regional plans and delivery structures (e.g. zone structure) and influencing policy-making.

> I think they are natural leaders in the community. And I think they see that it is a venue for them and feel they can do something at a bigger scale … Most of them, like XX, is the Shire President. You get the Shire President or someone who has been the Shire President, so they are or have been leaders. They are leaders, so they obviously see the next level or next stage. [regional project manager]

The regional scale provided a good example of State government giving strong leadership to community-led regional groups through strategic direction and experience in regional planning. As groups matured, they gained competency and confidence whereby community members adopted stronger leadership.

> In its own right, I believe the community members are becoming strong so that they eventually will be seen as leading the group, and the agency members will just be members. I think it started off as the agency members were really strong, but I think the community members are getting stronger, and they are actually coming to me [sic] forefront. [government person - regional]

> That is what the community members are striving for. As they do have ownership of this, they actually are playing a bigger role in making decision. Before it was the XX's and YY's [government members] who took over and ran it, but it is the AA's and BB's [community members]. [government person - regional]

LCD

Unlike regional and subcatchment scales, at the LCD level there were only two styles of leadership displayed: single dominant and passive leadership. The functioning of LCDCs with their limited spatial and issue focus, and little participation in decision-making at larger scale, precluded other forms of leadership such as external, government supported, and shared. Traditional formal organising also drove the structure and functioning of committees.

There were several leadership issues at LCD scale, with leadership viewed as prone to self-interest and undemocratic styles of directing decision-making. Perceptions by some members were of dominant and/or biased leaders in the Dumbleyung LCDC. Both LCDCs had problems associated with recruiting Chairpersons, and there was concern regarding leadership by LCDC members to manage community landcare coordinators, and provide a guiding strategic perspective to decision-making. A low level of strategic guidance by the LCDCs and their respective leaders may be artifacts of the limited time and resources available to citizens who are full-time primary producers and volunteers, and poor communication links between LCD and regional scales. The following quotes highlight some of the problems experienced at this scale in relation to leadership.

> No. There is not a lot of leadership if you like within the group really. In fact, we find it difficult to find a Chairperson every year. [community member - LCD]

> Again, it gets back to the lack of overall strategic direction. The community landcare coordinator is managed by a local group and that is where they get their direction from. And I really think there's been a lack of leadership there. [community member – LCD]

Subcatchment

Interestingly, at subcatchment scale there were many leadership types exhibited by individuals within groups (Table 5.1). Subcatchment organising may allow greater

flexibility in informal group arrangements and types of leadership, as opposed to more established or statutory aligned forms of organising common at larger scales. The diversity in leadership types can not be explained by group differences. All three groups shared many similar characteristics, such as their period of establishment, common goals and same operating environment. Subcatchment groups appeared less diverse than regional groups, yet they supported a greater number of leadership types. Shared leadership that characterised leadership in groups at larger scales (regional and State) was absent, and attributed earlier in this section to the "service" relationship associated with the Focus Catchment process. Similar to the LCD scale, there was a tendency for single dominant leadership, usually through a single long-term Chairperson.

5.4 Desirable Attributes of Individual Leadership

A number of the desirable attributes in Table 5.3 repeat leadership types, such as external and delegated, addressed in the preceding section (5.3) and Table 5.1. Whether these desired types were present or not is reviewed later in this section (see Table 5.4). The descriptions given in Table 5.3 for the desirable attributes of individual leadership were drawn from the analysis of the interview and participant observation data.

Table 5.3 Desirable Attributes of Individual Leadership for Social Sustainability.

Desirable Attribute	**Description of Attribute**
Leadership facilitates processes and interactions	The leader acts to facilitate intra-group processes and inter-group interactions by helping other members to communicate and produce shared outcomes.
Leadership succession	Maintain leaders within a group with formal and informal status. Timely leadership changes to prevent burn out and to allow organisational change to occur to meet new challenges.
Different leaders possible for different issues	Different leaders will emerge for different issues. Identify individual's specialty area and promote their involvement in that issue (e.g. biodiversity conservation). Enables different individuals to be more active within the group.
External guidance available	Provides new ideas, promotes the bigger picture, facilitates leadership, challenges existing paradigms of thinking, and promotes new achievements.
Organisational sub-structures available for specific tasks	Use of organisational sub-structures, such as sub-groups, to divide work and foster development of new leaders through specific interest areas. Aims to build confidence in potential new leaders. Good leaders identify and foster future leaders.

Leadership facilitates processes and interactions

> I don't necessarily think the Chairperson has to be a great leader. It just has to be someone that can manage a meeting, and be prepared to communicate a bit. [community member - subcatchment]

This leadership involves participants in a communicative mode of interaction and favours a joint approach focused on team leadership. Control was dispersed and decentralised. The central notions to this attribute were: dispersed power, use of delegation, and developing legitimacy through facilitating processes. The ability of individual leaders to facilitate interactions, mainly within group meetings, given they are the main method of contact between different individuals, is viewed as very important (Griffin 1999). Facilitation by leaders supported democratisation of the decision-making process by including all group

members to work towards solving problems. Better decisions for sustainability are a product of constructive group processes and interactions accompanied by informative group discussion.

This attribute was especially useful when groups had moved past the early formative stages and were looking forwards to positioning themselves, identifying their capabilities, and establishing their own rules and norms. Comments by respondents supported the need for facilitated leadership and broadening of the power base within groups. Individual leaders need to assist members to work collectively towards outcomes. A strong leader will utilise their energy and vision to motivate others to participate and champion collaboration (Selin & Chavez 1995), but not to the point where they suppress interaction.

> … driven by dominant individual, intimidation by leader, does not facilitate interaction well, does not facilitate group interaction. [government person - subcatchment]

Leadership succession with stability

There was a need for stability in leadership, but not to the extent that leaders became entrenched to the detriment of the group. Stable leadership was often advantageous for maintaining working relations with external partners, and providing organisational knowledge of the group's history and decision-making.

> I think the group has remained the same. Its probably been helpful dealing with outside partners, because you've had people who know what has been going on … so because there has been stability there, I think that has been good. [community member - regional]

On the other hand, a lengthy leadership term was viewed as restricting group development. These formal leaders, while acknowledged for their dedication, were seen as having fulfilled their functions. Often founding chairs, these leaders needed to allow new leadership to come to the fore. One effect of leadership by a single dominant individual

observed in several groups (subcatchment and LCDC), was a lack of interest by other group members in stepping forward and taking up a formal leadership role. A pointed comment was made about the need to delegate leadership to encourage future leaders.

> [We] need to structure XX [group] to decrease the Chairperson's workload and encourage future Chairpersons. [community member – regional]

Rotating leadership to maintain dynamic leadership within groups builds social capital by developing individuals' skills and knowledge, while also preventing burnout. The length of membership in groups such as those studied before re-election is often a 3-year term, and changing leadership at this stage has many benefits. It provides stability with diversity, along with maximising the use and development of other group members' skills.

Succession planning involves the replacement of current leaders who leave due to retirement, end of term or other reasons. Continuity of leadership is important for a group's success. Effective succession planning emphasises minimising disruption and dislocation arising from leadership changes, with a view to implementing transition (Huang 2001). A process of early identification of talented leaders, with actions to develop leadership growth is part of the planning. Although succession planning is an essential requirement for the long-term development and success of organising, it requires ongoing management and resourcing. Byron and Curtis (2002b) found a high degree of uncertainty over leadership succession in 400 Landcare members and Landcare leaders surveyed in Queensland. This result suggests that often no formal group plan or policy exists to manage leadership change, and when there is a policy on leadership succession then at least half of the members are unaware of its existence.

Different leaders possible for different issues

Different individuals in the case study groups "championed" specific natural resource management issues, such as nature conservation, drainage, and no-tillage. Members drew on specialised knowledge and personal experiences. The resultant decisions benefited from the motivation and commitment of different leaders, and the sharing of their wealth of knowledge.

> Often what you find is that you get different leaders on different issues. When you are dealing with salinity some people come forward as the leaders, and when you're dealing with biodiversity issues someone else will become a leader. [community member – State]

> It is very important that the executive of XX group are the shakers and more active movers of the group … the successes of the group I think come about by the ones that are very enthusiastic being able to influence the general, the ones that are not negative, but sort of in between … it's a strength of the group I think is going to be those key people that keep on, and it's not the same persons all the time. It's got to be several people that keep on talking the group up. [community member - subcatchment]

Advantages of different group members taking leadership roles included the sharing of workloads, accessing and building of expertise and knowledge, and the moving forward of new leaders to share responsibilities. This comment by a group member aptly summed up the need for shared, balanced leadership.

> difficult to be the Chairperson of the group … provides energy into roles and direction and it would be even harder if half to three-quarters of the people are so busy they can't give you the support that you need … we're going to run out of energy in the people, maybe that's why you have to change [community member – regional]

In support of this feature, McGuire et al. (1994) in their examination of capacity development highlighted the value of dispersed leadership roles, with issues divided between different persons.

External guidance available

External guidance by government agency persons, funding providers or scientists included facilitation of a decision-making process, conflict resolution, information for strategic planning, or being a "voice" in group meetings. This desirable attribute complements and builds on the external leadership type previously described.

> [The] fact that individuals are there to drive it, but they [community leaders] haven't got the framework there that enables them to get there. I suspect that if they're going to perform at higher level there will need to be some external input to take them through that, up to the higher level [external person – subcatchment]

This leadership attribute also supplements current leadership by bringing to the group innovative ideas and processes, and framing decisions with respect to the "big picture". Similar findings by Kilpatrick and Falk (1999) found external linkages are valued by people for the access to knowledge from the broader society, which has a wide pool of social capital upon which to draw to produce potentially better outcomes.

Organisational sub-structures available for specific tasks

Organisational sub-structures such as executive committees improved the efficiency of groups. For example, at the regional scale executive committees with several elected group members, were delegated the responsibility for out-of-meeting decision-making. Projects run by sub-groups allowed individuals to use their skills, while whole-of-group activities and the associated meeting format restricted them in expressing these skills.

> So, they have a very top man approach to things even though they do have skills in the group that they should be using but they are not. [government person - subcatchment]

> When we split them up into different project areas, they had to have a leader of that project. And it was interesting to see how some of them really lead. They were given the opportunity and they lead. But others weren't interested, and you had to keep chasing them … for instance [project X] that was XX's baby. He just went for it. He organised things … So, it shows he has the leadership to go off and do it. He is running a 10,000 acre farm so it is hard for him to become a leader of the group itself. [government person - subcatchment]

Formation of sub-groups allowed much of the organising, conceptualising and strategising to be carried out. In these meetings individuals were able to share ideas and learn from one another. For example, the sub-committee of the Avon Working Group produced the final draft of the natural resource management strategic plan for the region by utilising a core group of current or emerging leaders. While ideologically committed to community participation and deliberative democracy, the practical reality was the size of the group posed a potential disaster for working up a plan in a timely fashion. At the same time, members had concerns that the other group members would not share understanding or ownership of the plan. This was addressed by having regular dialogue with the main group through verbal and written reporting, and having an open door approach for other members to participate in sub-committee planning.

Desirable Attributes of Individual Leadership Types at Different Scales

Respondents had high and fairly similar expectations at all spatial scales, except State, regarding the types of leadership needed (Table 5.4). From participants' consistent responses, the comments suggest self assessment of leaders was similar to that of other members' assessment. At State scale, expectations associated with only one leadership type suggest lower (and more realistic) expectations regarding leadership and/or satisfaction with current leadership. As with individual and group representation (Chapter 4), there were high, but some unmet, expectations associated with the community-led regional groups. A great deal was also expected of government-led regional groups and subcatchments.

Interestingly, LCDCs and subcatchment groups shared the desirable attributes sought but absent. Members of these groups desired individuals who facilitated leadership, stable

leadership, and guidance from external parties, such as government agencies (Table 5.4). The similarities at these two scales suggest a shift from a traditional mode of leadership that has been a feature of the formative years of Landcare. Development of groups within an increasingly competitive environment and diminished resources may be creating new leadership requirements at these smaller spatial scales.

Table 5.4 Desirable Attributes of Individual Leadership at the Different Scales.

Desirable attribute	**State**	**Regional**		**LCD**	**Sub catchment**
		Government-led	**Community-led**		
Leadership facilitates processes and interactions					
Leadership succession					
Different leadership possible for different issues					
External guidance available					
Organisational sub-structures available for specific tasks					

Light shade - attribute desired and present
Black shade – attribute desired and absent
Gray shade - attribute not mentioned

Of the five desired attributes, “successional change” of formal leaders (e.g. Chairpersons, secretary, coordinators) was the most desired but absent attribute highlighted by many participants, especially at regional, LCD and subcatchment scales (Table 5.4). This

attribute was viewed as important for organisational growth and development, as opposed to lengthy periods in positions.

> Leadership is stagnated, and should be a totally different person. For example, the XX group has had two changes in leadership, and have had good leaders, and bought in the younger generation. XX gets his stuff done, but it is his way or no way. [government person – subcatchment]

> I think the leadership dynamics have changed over time. XX was clearly a strong leader early on, and he just consciously tried to hand over that leadership role to others by pulling back and moving on to other things. I think other individuals are coming forward as leaders. [external person - subcatchment]

Of least importance to group members was leadership that utilized organisational sub-structures. Perhaps this attribute was perceived by many respondents as a more general feature of organising and operating effectively than leadership.

State

Different leadership for different issues was the only leadership attribute mentioned as desirable at this scale. It was noted as present. This leadership drew on individuals with specific areas of expertise, such as sustainable rangeland management, remnant vegetation clearing, etc. Most group members at State scale had significant leadership experience and expertise in specific areas of natural resource management.

Regional

As mentioned previously, the highest expectations regarding leadership were associated with this scale. Leadership succession was desired but absent within both types of regional groups, to provide innovation and overcome burnout.

> Difficult to be Chairperson of the group [regional partnership group]. Provides energy into roles and direction. And it would be even harder if half to three-quarters of the people are so busy they can't give you the support that you need. And I think that is the situation we are in. We are going to run out of energy in the people. Maybe that is why you have to change. [community member – regional]

Attributes present in both the government-led and community-led groups to support leaders included use of the appropriate processes and interactions by leaders to facilitate leadership, and access to external expertise and information.

> I am still leading it - in that I'm still questioning what they [community-led group] are doing, and I think that is a healthy thing. [support person – regional]

Government-led groups differed in two attributes from the community-led groups. The latter was able to use members to champion specific issues, drawing on a spread of leadership. And, the government-led groups did not identify organisational sub-structures as part of leadership in contrast to the community-led groups (Table 5.4).

LCD

At LCD scale, all three desirable attributes identified as necessary were absent: leaders facilitating communication and interaction; fostering new leadership to replace entrenched leadership; and the opportunity for external persons with specialised expertise to assist the group. Underlying these desirable attributes was a search for new leadership and direction.

Subcatchment

For the subcatchment scale, similarly to the community-led regional groups, a suite of desirable attributes were mentioned. Of these, less of these expectations were met at the subcatchment than regional level (Table 5.4). Many individuals suggested what could be done if there were changes in leadership. Current leadership appeared to be stifling group development and the building of leadership capacity. This was particularly true for groups where leadership had remained unchanged for a length of time.

> [The] Chairperson needs to facilitate and involve [others]. XX is not the best person to keep the group up and running. Hope to influence other groups; he is not very active in this role. He is a very strong character, and he is the underpinning frustration that [other members] has with the group. It is with

> XX. We have gone past the type of leadership he has. It was necessary at the beginning with the group. [community member - subcatchment]

Many groups had benefited in the past from external guidance, but this tended to be sporadic and limited. The use of organisational sub-structures was becoming a more common approach to dealing with the different land management issues (e.g. wind erosion, salinity) across a subcatchment, and proving a useful way of mobilizing members' interest and commitment to collective actions.

> Tackled all the different projects and they have got different leaders. People have been willing to take it on, and that has been working quite well [interviewer: has the process enabled different leaders to be more active within the group?] Yeah, that has been great, it seems to be working quite well. [community member – subcatchment]

> When we split them up into different project areas they had to have a leader of that project, and it was interesting to see how some of them really lead. They were given the opportunity, and they lead. [government person – subcatchment]

5.5 Types of Group Leadership

Group leadership is the combined influence of a number of individuals within the group to create direction. Leadership is not directed from any one individual, but rather expresses itself from the combined discussions and compromises between individuals. In contrast, individual leadership is direction imposed by a key individual that shapes group discussion and decision making.

For many of the groups, leadership was very outward focused and directed towards optimising opportunities the group through alliances, and projecting an image of competency, credibility and legitimacy to group members and others (e.g. funders, wider community). As shown in Table 5.5, these types of group leadership were both "given" (e.g. legislated leadership) and "created" (e.g. leadership by self-determination) as part of ongoing group activities. Where legislated leadership is present, leadership by self-

determination is often absent. This may suggest that self-determination is a possible response to the lack of a designated leadership role for these groups.

Table 5.5 Summary of the Group Leadership Types at the Different Scales.

Leadership Type	**State**	**Regional**	**LCD**	**Sub catchment**
Leadership by group self-determination		X	X	X
Legislated leadership	X		X	
Leadership through partnership		X		X

Leadership by group self-determination

Social self-determination is about local control in decision-making. Inclusion of local communities in planning processes is a step towards social self-determination. The principle of self-determination parallels equity and social justice but is distinctive through its emphasis on self-reliance, individual development, and fulfillment outside of materialism (Gardner 1989). More importantly, it identifies that "centralised control cannot effectively tap the managerial capabilities of local communities or the potential for citizen initiative in promoting ecologically sound behavior, especially on a voluntary basis" (Gardner 1989, p. 343).

> … have not waited for them to tell us what to do. We have gone out and done it, where it is needed. [government member – regional]

Self-determination is a community development term used to describe the development and exercise of decision-making and other cognitive skills with an emphasis on autonomy. As Sprague and Hayes (2000) explain self-determination is both the expression of and the means for developing one's self. In this study, it involved a local or community initiative

and taking control of direction in decision-making by using the capability of individuals and groups. It is also used in conjunction with self-reliance, where sustainability requires structures that are not dependent on external resources (e.g. funding) but increase autonomy and maintain long-term resource independence (Ife 1995). Both terms are used in relation to bottom-up development and oppose centralised actions.

Socially sustainable decisions depend on nurturing community self-determination. Actions arising from self-determination in this study were very similar to those put forth by Wilkinson and Quarter (1995) for self-reliance. These included the local direction of projects, the utilisation of local knowledge, and the formation of collaborative external relationships. Leadership by groups involved taking responsibility for generating ideas, and adopting a proactive approach through harnessing group efforts, capabilities and resources. The alternative was being dependent on others to provide prescribed solutions that would restrict the group's ability to solve their own problems.

At regional scale, the South-West regional partnership group saw themselves as leaders in the Sustainable Rural Development program. They shared leadership with the local community through several project initiatives that provided State-wide benefit and assisted other community groups. The group proposed a preferred future for agriculture, and put forward the factors that would lead to success.

> We are showing a fair bit of leadership, and making a significant shift in what we do. I think change in mainly leadership for the rest of the organisation … at the State level agriculture needed to have a stronger voice in the planning. And that has stimulated land use planning work that we have been engaged in, and shown a lot of leadership in that area. [government person - regional]

> When we talked with other partnership groups and industry holders, I thought that was interesting in the sense, the group basically took on a leadership role here, beyond our brief … one of the horticulture program mangers said "what are you doing, why are you guys doing it, it's not your job". [government person - regional]

Development of the regional strategic plan by the Avon Working Group showed community leadership. By not following generic Commonwealth guidelines, the Avon Working Group expressed community leadership, fostered ownership and control, and addressed region specific issues.

> … develop plans for ourselves and see how they fit into the funds. Write regional plans for ourselves, take it outside of the political arena … If it's not perceived to be ours then we're wasting our time. So, I think we only gave very scant regard at this stage to the guidelines that have come down from the State and federal governments. [community members - regional].
>
> The opportunity is that the region takes the lead, and sets the boundaries and directions for the State. But, the risk is that the State will just come in and do something that might conflict with what the regions have done. [government person - regional]

While government has long led groups, an emergent feature found from the data was groups taking responsibility for their own futures. Pretty and Frank (2000) note that groups are now more engaged in shaping their own realities by looking forward. They undertake critical reflection (how we came here) combined with abstract conceptualisation (how would we like things to be). This allows groups to be more dynamic and productive, and ready for change (Pretty & Frank 2000). Good descriptors of this leadership are "active" and "interdependent". Pretty and Frank (2000) suggests groups showing this leadership are more likely to achieve higher level goals.

At the smaller scales of organising studied, one LCDC led the drive for change in regulatory drainage reform, and the other identified deficiencies and problems for government (and the Soil and Land Conservation Council) to address. In the latter case, the LCDC led the broader community to obtain State-wide support for Landcare tax rebates and took it into the national political arena

The Wallatin Creek Wildlife and Landcare Inc. case was an example at subcatchment scale, of leadership by self-determination and partnership leadership, where the collaborative efforts of the Commonwealth Scientific and Industrial Research Organisation and the subcatchment group led to an outcome of mutual benefit, self-determination and greater capacity to direct future activities.

> Wallatin Creek Wildlife and Landcare Inc. catchment are leaders in awareness and commitment in nature conservation planning. Wallatin Creek Wildlife and Landcare Inc. designing corridors and habitats. [external person – scientist]

Legislated leadership

Leadership as a function of a group's statutory role was evident from the Soil and Land Conservation Council and LCDCs. This statutory basis gave legitimacy to the groups and gave their decisions authority. Leadership for the Soil and Land Conservation Council was about fulfilling responsibilities to the Minister, as well as providing direction for communities.

> I think also in terms of the leadership that it's been able to pass down towards the community groups … Council has the relationship with the Minister, who's the Minister responsible for delivery of, or implementation of, the Soil and Land Conservation Act through the Commissioner and so on. So, it's important that Council is able to provide clear advice and leadership to the community, and also to the Minister on these matters. [government member - State]

Greater accountability and responsibility was expected at State scale. Leadership premised on a legislative foundation can be constrained by the statute itself. This occurred in relation to exclusivity of membership, administrative and operational funding sources, and the scope of the group's mandate. Unlike other types of leadership, groups were accountable to higher levels of authority, which placed greater responsibility and restrictions on members.

> You can take your independence just a certain distance and then you isolate yourself. And had we been making policy decisions that Ag [Agriculture WA] didn't like, or went against their policy direction, they could pretty quickly starve us to death. [community member – State]

Leadership through partnership

Partnerships[4] can help develop the capacity of individuals to deal with resource management issues. Collaborative relationships between government agencies, industry (e.g. mining company Alcoa of Australia), and community groups in the study areas assisted in an on-going process of community development, including leadership. Generally, partnerships increased the resources and capacity of groups, coordinated actions, and provided groups with enhanced political influence.

At regional scale, partnerships between the community-led groups and government agencies have enabled them to show greater leadership by building resources and legitimacy from a shared approach. This leadership through partnerships has allowed community-led regional groups to implement their regional initiatives. For example, to inspire sustainable community management in the Blackwood Basin, the Blackwood Basin Group had strategies for community leadership, and contributed to political decision-making, resourcing and strategic direction. They acted in cooperation with government agencies (Agriculture WA, CALM, WRC) through partnership arrangements. As a means of working together and attaining common goals, the Blackwood Basin Group formalised these arrangements by entering into Memorandum of Understandings with some of their partner agencies (Agriculture WA, WRC). To show leadership to communities and the federal government, the Blackwood Basin Group established partnerships with the recognition that "these relationships and the range of activities conducted jointly are vital to the Blackwood Basin Group's ability to deliver on-ground change and vital to the agency's implementation of regional strategies" (Blackwood Basin Group 2000, p.18).

[4] Partnerships as collaborative relationships comprised of linkages and structures between two or more stakeholders in a cooperative situation with all parties having equal power (Wondolleck &Yaffee 2000). Partnerships are explored in detail in the next chapter.

Similarly, partnerships between the Avon Working Group and Agriculture WA opened up avenues for leadership by the group, with greater influence over State government agency operations.

> It isn't an Agriculture department group, it is more of a community and government partnership. And they're prepared to have a lot more say, and you see their managers having a lot more say. [community member – regional]

Through shared leadership arrangements, often based on partnerships between government and communities, the community-led regional groups have been able to lead communities and funders (federal government).

In the past, leadership through partnership has been demonstrated at subcatchment scale by groups such as the Gabby Quoi Quoi, who have been part of a tripartite partnership between local landholders, government and industry. These groups have shown leadership to other Landcare groups across Western Australia by their commitment to sustainable activities. Such partnerships can be viewed as a "means to an end" (Moore et al. 2001), in this instance providing the avenue (means) for groups to show leadership to their peers, government and society, to achieve the end, addressing land degradation. Also, commitment to joint outcomes gave groups confidence to take the initiative and invest in the future. This allowed groups such as the Blackwood Basin Group to "act as an agent for change by catalysing action to improve environmental, social and economic aspects within the Basin" (Blackwood Basin Group 2000, p. 12).

Group Leadership at Different Scales

Leadership by group self-determination was the most common leadership type (Table 5.5). Groups at regional and subcatchment scale also relied on partnerships. LCDCs showed an interesting combination of self-determination and legislated leadership.

State

Theoretically, State scale leadership should provide the overarching framework for the administration of a whole of government approach to natural resource management issues, producing a coordinated and consistent process to planning and management. However, the powers (statutory and informal influence) available to the Council to reach solutions were limited by factors beyond their control. For example, leadership taken at State scale by the Soil and Land Conservation Council was demonstrated by facilitating a process for drainage policy reform, to address the problem with technical and administrative procedures. In this situation, leadership ability was constrained by the Council's lack of power to gain speedy resolution to the conflict and present a consensus government position on deep drainage. Inability to achieve sign off by each government agency by senior bureaucrats outside of the Council was a major barrier, and led to a protracted process. Failure to reach a whole of government consensus further aggravated and entrenched conflict in communities. The group could not lead by self-determination given their legislative functions, directives from Ministerial level and hampered progress. Uncooperative State government agencies sought to maintain their individual positions on drainage.

Uncertainty over the group's future clearly affected leadership through partnerships for the Soil and Land Conservation Council. To some degree their struggle for power and identity with the more recently established State Salinity Council inhibited their group leadership

and weakened their leadership status. Knowledge of their impending dissolution restricted their ability to implement long term strategic plans. Many members alluded to the problems experienced by stating they had “an axe hanging over their head”. Group members suggested knowledge of future existence was necessary for groups to be proactive and strong leaders.

> In the 90’s, before the end of line dangled in front of it, I believe it was very much a leader in the resource management area, and also in terms of taking community group development up to a very high level [government person – State]

Overall, the constraints on group leadership were a combination of the group’s legislative basis, their uncertain position in an evolving natural resource management framework for the State, and their future existence as a group. This last issue was the main concern.

Regional

Leadership through partnership was more evident in community-led groups, with formalised, State government partnerships, than the government-led groups. Absent from both types of regional groups was leadership through partnerships with other regional groups, either community-led or industry-based. While partnerships were desired with other regional groups from a strategic standpoint, and effort invested in exploring opportunities, these activities frequently failed to eventuate in collaborative action. Possible reasons may lie with the competitive funding environment at regional scale, insufficient resources to invest in non-core activities, and a poor understanding of the needs of partners, partnership processes, and the potential outcomes from investing in partnerships.

The delay in forming a State steering committee to oversee and direct the regional partnership groups meant there was no environment created for intra-agency group partnerships between regional partnership groups and other agriculture program groups.

> I think all the individual components of the Sustainable Rural Development program, be it the steering committee and the individual regional partnership groups, are all operating not exactly in a vacuum, but they're all searching around for what it really means. So busy trying to find what it means to them, that they haven't actually got together and found out what it means to us all … make sure we are all charging in the same direction … There's no direction. There's no lead … I think it needs a bit of good leadership to put it all back together again. [community member – regional]

At a regional scale, self-determination leadership occurred through community-led groups setting strategic directions through natural resource management plans, or gaining resources for implementation.

> The Avon Working Group should show leadership through the way it uses the document and writes it. [government person - regional]

> [I] see it more as a banging on doors, getting resources - and anything else that's required - to allow the people who are going to do the ground work to be able to do it. [community member - regional]

It was evident that regional partnership groups exhibited strong leadership, but as single regional entities with self-determination. The analogy used in one respondent's comments illustrated this point.

> It's a vision that exists amongst regional program managers, and they operate that way. It's been a down side that for the agency, it's all little Balkan republics, and they're all watching. [government person - regional]

LCD

Leadership through self-determination was strong at LCD scale. The LCD scale also included legislated leadership to direct land management at the community level. The management focus of LCDCs, and the limited resources of small, voluntary community groups explained the absence of group leadership through partnerships.

Subcatchment

At subcatchment scale, current efforts by State government agencies and other external organisations, to implement the Focus Catchment process and nature conservation plans, failed to produce partnerships. Initially, government agency personnel and external parties directed actions and outcomes, resulting in a subsequent lack of ownership by community members. This was in contrast to Gabby Quoi Quoi's successful tripartite partnership with Alcoa of Australia and the Department of Agriculture (Moore et al. 2001).

> Maybe they could develop those themselves so that they have much stronger ownership of it. So, the problem for the XX group was that I as the "driver" changed my mind halfway through the process. [external person - subcatchment]

To counter this, groups became more assertive, directing people to achieve desired outcomes and develop their capabilities (knowledge and skills). Group development played a significant role in a group's ability to form and utilise partnerships to lead. Groups were beginning to explore and discover new opportunities for partnerships that would provide them with the resources and status to lead communities. Wallatin Creek Wildlife and Landcare Inc. were pursuing stronger formal ties with Greening Australia, and involvement in their Living Landscapes project to further nature conservation planning and management. In the decision studied, they did not lead through partnership, but rather through effective organising to control decision-making and set their own projects.

5.6 Desirable Attributes of Group Leadership

Two attributes of group leadership emerged as desirable: impression management by the group and heightened awareness in communities (Table 5.6). Both seek to influence landholders and funders, including government bodies. Creating a positive group identity through impression management was seen as a means of developing community and

government commitment, especially for partnerships. To be effective in their roles, groups needed to obtain the support of individuals and to influence actions.

Table 5.6 Desirable Attributes of Group Leadership for Social Sustainability.

Desirable Attribute	**Description of Attribute**
Impression management by the group	Managing the impression of those observing or involved with the group as a means of influencing to attain benefits.
Heightened awareness in communities	To promote and make visible the group by educating and informing communities, thereby expanding their knowledge and understanding of the group's role, how it operates etc.

Impression management by the group

Impression management refers to "the many ways by which individuals [and groups] attempt to control the impressions others have of them: their behaviour, motivation, morality, and a host of personal [and group] attributes" (Rosenfeld et al. 1994, p. 601). It involves people manipulating or controlling the process of social interaction so others have positive reactions to them or their ideas (Rao et al. 1995). Impression management is not a new concept in group organising, it has been previously identified as a key element of stakeholder involvement in natural resource management contributing to achieving outcomes (Moore et al. 2001). By managing the image of the group as being the "place to be" to successfully fulfill natural resource management goals for sustainability, it produces a positive picture of itself to sell to opinion leaders. This was an important attribute given many groups, particularly regional ones, promote themselves as representative of communities and the "voice" of rural landholders. They need to have the broad support of communities for legitimacy. By projecting a positive image to communities, they strengthened their credibility.

The attention given to impression management by most groups suggests they were strongly oriented towards seeking to influence decision-makers and secure funding. Not surprisingly, impression management was an important attribute of group leadership at the scales funded by government (regional and subcatchment). It was also an attribute at State scale, and assisted in influencing Ministers and other senior decision-makers. An example of outward impression management is illustrated by this comment.

> We should be selling ourselves better … honestly [I] believe we do things a lot better than the XX region does, but we don't promote ourselves as well as they do. They do that the best of all the groups, and people automatically pick the XX group as being the leaders … Whereas we've probably been achieving more on the local scene, but not selling ourselves to the outside world or in that fact to the local farmer [community member - regional]

Heightened awareness in the community

As part of achieving sustainable natural resource management, groups need to be actively communicating with communities on natural resource issues. Having knowledge of natural resource management groups was seen by respondents as important from an implementation perspective.

Desirable Attributes of Group Leadership at Different Scales

According to Table 5.7, nothing was expected, in terms of group leadership at the LCD scale. Reasons for this may lie in problems with individual leadership. In particular, the struggle to obtain new leaders may have detracted from group members' attention to group leadership. Also, LCDCs perform a managerial or coordination role with subcatchment groups, and thus greater community awareness is not essential for them to fulfill this role. For the community-led regional groups the expectations of respondents were not met regarding desirable attributes. This contrasts individual leadership, where these expectations were at least partially met at this scale (Table 5.4). One interpretation of this

difference is that energies are being directed at getting leadership right within groups, rather than towards group leadership.

Table 5.7 Desirable Attributes of Group Leadership at the Different Scales.

Desirable attribute	**State**	**Regional**		**LCD**	**Sub catchment**
		Government-led	**Community-led**		
Impression management by the group					
Heightened awareness in communities					

Light shade - attribute desired and present
Black shade – attribute desired and absent
Gray shade - attribute not mentioned

State

At State scale, the Soil and Land Conservation Council could only advise on Ministerial decisions and exert direct power through influencing higher level decision-makers. This placed importance on using upward impression management. Given the group's policy-making focus, exhibiting group leadership to communities through promotion and education activities was not as important.

Regional

Impression management was successfully carried out by the regional partnership groups through continued feedback to government about their activities and production of their strategic regional plan.

> At the State level, agriculture needed to have a stronger voice in the planning, and that has stimulated land use planning work we have been engaged in, and shown a lot of leadership in that area … We have had a major influence on the

> new policy. We have basically reshaped the environment that agriculture is operating in. [government member – regional]
>
> The South-West Regional Partnership Group has high credibility, and a credible product as "the" regional strategy. [government person – regional]

In contrast to the government-led groups, the community-led groups were not able to see how they influenced or bought about change. They operated with limited feedback from government outside of their government members' contributions. The groups sought to promote themselves through the media to raise their profile. However, members overall perceived that impression management was needed but that they were not doing it (effectively).

There was poor awareness in communities of the roles and functions of regional organisations (community-led and government-led groups) (Table 5.7). A survey conducted in the Blackwood basin found respondents had insufficient knowledge of the group (Agknowledge 1999). Also, comments made by communities during the public consultation phase for the Avon River Basin strategy identified opportunities to improve the communities' awareness. Limited dissemination of information by members back to the communities they represent was part of the problem. At regional scales, the development of strategic regional plans allowed regional organisations to operationalise their leadership role. It allowed groups to demonstrate leadership to the community and government through development of a credible product that embodied the purpose of the group.

> QU: What do you see as the Avon Working Group's role?
>
> Community Member: Certainly to lead, and be more of a champion for Landcare issues within the Avon Basin. And I think we can do that in a range of ways. And I think without the plan we're not going to it in an organised way. [community member – regional]

Increasing communities' awareness of groups was essential for regional groups in building credibility for adoption of plans for on-ground work. Particularly for community-led groups, presenting a successful and effective image to funders and communities was necessary for gaining financial and human resources. However, these activities also involve a level of collective effort and investment, which was often outside their budgets. Fostering increased community awareness of the Sustainable Rural Development Program was necessary for the regional partnership groups, but it was more about disseminating information regarding projects advancing sustainable agriculture, and less about legitimising the group's existence.

> I would say the level of awareness [of the regional group] is almost zero. Particularly where we are - where we farm … We have a major problem in the promotions area … If we surveyed the local farmers in the Avon river basin an asked them what they knew about the Avon Working Group, I would suggest that more than 50% would say I have never heard of it, and most of the rest would say the knew very little … Something that I would really hope to correct. [community member – regional]

LCD

The absence of interests in group leadership by participants at the LCD scale reflects the roles of LCDCs, which include subcatchment coordinating and information dissemination.

Subcatchment

For subcatchment groups, impression management assisted in getting sponsorship and involving the broader rural community in Landcare activities. Promotion of group successes (Gabby Quoi Quoi on-ground implementation and demonstration catchment) and innovative new endeavors (Wallatin Creek Wildlife and Landcare Inc. nature conservation planning for sustainable landscapes) were important for subcatchment groups as a means of showing leadership to other subcatchments, government and the wider communities. Managing the impressions held of the group by external parties was vital to group success.

[We need a] more strategic approach to protecting remnant bush … I have got Greening WA coming out. I want to try and persuade them to actually identify remnant areas that are probably very fragmented, but can be actually linked [community member – subcatchment]

CHAPTER 6.

PARTNERSHIPS AND SOCIAL SUSTAINABILITY

6.1 Introduction

This chapter begins by discussing the connection between partnerships and social sustainability. Then as a foundation to understanding partnerships, the definitions constructed by participants are investigated. Three types of partnerships; government-community, local government-community, and research community-community; are explored in detail. This exploration concludes by weighing up the costs and benefits of partnerships. A discussion of the desirable attributes of partnerships follows, considered separately as "process" and "substantive" attributes. The chapter concludes with a brief review of the factors influencing partnerships. Partnerships depend on how their representatives are selected, as well as the leadership exhibited by involved individuals and groups. Hence this chapter closely relates to the preceding two chapters.

A wealth of literature exists on partnership frameworks, success factors, processes, and organisational skills (Wondolleck & Yaffee 2000; Alden and Schroeder 1998; Selin & Chavez 1994; Wood & Gray 1991). Constraining factors include organisational culture and power differentials between partners, and when some partners are not perceived as having a legitimate claim to participate in consensus decision-making (Selin & Chavez 1995). Similarly, other major challenges to managing partnerships across political, administrative and geographical boundaries exist (e.g., politics, conflicting agency goals and difficulty in securing involvement of all interests). Current literature reports on a number of factors identified as crucial for successful partnerships and effective

collaborations. Such factors may be personal (e.g. strong leadership), interpersonal (e.g. trust), organisational (e.g. administrative support) or operational (e.g. written plan) (Selin & Chavez 1994).

In practice, successful partnerships involve, firstly, using a documented operation plan with cooperative agreements (Alden & Schroeder 1998) underpinned by strong relationships. A point made by Rhoads et al. (1999, p. 301) is that "…genuine social interaction cannot be ensured by formal prescriptions. Sincere dialogue requires effective communication, which in turn must be based on relationships characterized by mutual understanding, respect, and trust".

Wondolleck and Yaffee (2000, p. xiii**)** describe partnerships as involving cooperation between individuals or groups "moving in concert in a situation in which no party has the power to command the behaviour of the others", with the formation of bridges (informal and formal) to enhance resource management. This definition is favoured because it presents partnerships as dynamic and crossing multiple boundaries (geography, jurisdiction, perceptions, interests and organisational affiliations), where no one party has power over another. The emphasis is on equitable arrangements and equal status. In contrast, a very different view of partnership is based on the principal-agent model that describes collaboration as linkages along the hierarchy, such as from bureaucratic to citizen, highlighting the perpetuation of power imbalances.

> …[partnership] is an analytic expressive of the agency relationships, in which one party (the principal) considers entering into a contractual agreement with another (the agent) in the expectation that the agent will subsequently choose a course of action that produces outcomes desired by the principal. (Desai 1996, p. 230).

As mentioned in Chapter 1, social sustainability requires partnership arrangements that support the capacity of partners to undertake collaborative planning and management.

The Contribution of Partnership to Social Sustainability

Partnerships may also be defined as "the voluntary pooling of resources (labour, money, information etc.) between two or more parties to accomplish collaborative goals" (Gray 1985). Resulting from partnership is collaboration, a process of partners constructively searching for solutions that go beyond their own capacities of what is possible (Bond & Keys 1993). In the words of Wondolleck and Yaffee (2000, p. 45) "collaboration is not an end in itself; it is one strategy for achieving more sound and sustainable resource management".

The terms partnership and collaborative arrangements have been used interchangeably. In this study collaboration[1] has been used to describe the action function of partnerships, as opposed to Selin and Chavez (1995), who place partnerships as a subset within a larger framework of collaborations. The collaborative process involves seeking consensus on problem definition, devising mutually agreeable solutions, and taking collective action to implement shared decisions (Gray 1989). Consensus on action is a goal of collaboration and prevents partners working against each other.

Partnerships can contribute to social sustainability by: a) increasing the capacities of partners to realise outcomes; b) facilitating community leadership and collaborative learning; c) providing a participatory process that builds confidence in outcomes and partners in the absence of conflict; and d) constructing relations based on shared control and fair power arrangements. These contributions can result in empowerment, capacity building and social capital gains for groups.

[1] Collaboration occurs through a relationship of interdependence fostered on respect and understanding of the unique and complementary attributes each partner uses to achieve desired outcomes.

Creating partnerships can be an empowering act for participants and groups. In terms of engendering empowerment, partnerships provide commitment to, and involvement in collaborative problem solving. "Collaborative empowerment"[2] can lead to building capacity for change (Fawcett et al. 1995). The downside is managing collaborations places additional demands on a group's limited time, resources and energy (Wondolleck et al. 1990). To facilitate empowerment, partnerships aim to distribute power equally and to facilitate acceptable decisions (Wondolleck 1988). Equal influence in decision-making by partners is not only democratic, but assists negotiation of shared decisions, and produces the necessary organisational setting for empowerment.

To enable the existing legal and administrative structures to create an empowering environment, attention to negotiating property rights, administrative decentralisation, and interagency coordination is needed (Wondolleck 1988). Citizens entering partnerships usually anticipate participatory democracy, which requires governments to share decision-making power and authority with other stakeholders (Moote et al. 1997). Calls for the establishment of new power-sharing, and accountability procedures are not new (Born & Sonzogni 1995). The degree of power sharing and the process of "handing over" to communities, have been accomplished in numerous ways by various groups, as discussed later in this chapter.

Social capital is a key contributor to social sustainability (Fig 1.1). Broad-based participation and partnerships between the government, the private sector and civil society enables social capital to be realised (Mohan & Stokke 2000). In relation to social capital, Fawcett et al. (1995, p. 694), in quoting Himmelman (1992), reiterates the transformative function of participation in partnerships where "collaborative

[2] This concept includes four strategies of the "community empowerment" model: 1) enhancing experience and competence; 2) enhancing group structure and capacity; 3) removing social and environmental barriers; and 4) enhancing environmental support and resources (Fawcett et al. 1995).

partnerships attempt to promote societal change systematically through new patterns of relationships among parties who share a common purpose". When groups and organisations link with each other through partnerships beyond their own communities, these collaborative activities contribute to the building of social capital. The building of bridges between communities and government, as described in the literature to explain collaborative efforts and social capital building (Wondolleck & Yaffee 2000; Kilpatrick & Falk 1999), stimulates and increases the social learning vital for change.

Partnerships also contribute to capacity building through strengthening of participants' competencies. As Dugan (1993) points out, working collaboratively strengthens one's own capacity to stimulate and manage resources, and develop further actions. The result is a strengthening of each partner's capacity to become more effective at solving problems and less reliant on others to realise their own goals. Partnerships can produce better decisions by developing stronger shared understanding (Wondolleck & Yaffee 2000).

Community-led partnerships[3] have received a great deal of attention over the past decade, particularly in relation to community development. They are viewed as one approach to work through increasingly complex societal problems. The concept of collaboration and partnership has also taken root in the natural resource management literature, and has become an accepted structure called upon by government and community leaders for addressing environmental problems. Partnership efforts are being supported through initiatives at federal, State and local level, and across the public and private sectors in Australia. These partnerships aim to promote community capacity

[3] Partnerships are frequently referred to as community coalitions in the community psychology literature, and are viewed as an integral part of community development and organising (c.f. McMillan et al. 1995; Butterfoss et al. 1993)

building that increases confidence, competencies and social networks among participants (McMillan et al.1995). The utility of community-led partnerships is that "they can engage broad participation, which increases local ownership, thereby expanding resources and increasing commitment to sustaining activities long term" (McMillan et al.1995, p.699). Why partnerships have become a major component of a comprehensive approach to achieving sustainability is attributed to four factors: 1) multi-actor and sector representation; 2) coverage of multiple issues; 3) active local citizen participation; and 4) bottom-up planning and decision-making (Berkowitz 2001).

By learning together, either through formal or informal situations, people involved in constructing a common understanding also come to understand the constraints of their partners and the options available. Reaching collaborative outcomes through shared learning comes from partners committing to a process of mutual learning that builds a collective understanding of the problem, identifies and explores options, and leads to the acquisition of new information (Wondolleck & Yaffee 2000). In this study, community members who had previously seen the government as having all the answers came to understand government's limitations.

Collaborative learning, as a means of making decisions and managing complex problems, provides a framework for improving natural resource decisions (Daniels & Walker 1996). Organisations need to be involved in a continued process of learning to become sustainable, using the acquisition of new knowledge to revise plans by translating internal change to change in the external environment (Iyer-Raniga & Treloar 2000). The emphasis is on activities that promote joint learning, open communication, systems thinking (structuring information into sets of relationships) and ultimately directing change. To enable these activities there is a need to overcome the

presumption of agency professionals as fully informed, thereby inferring only the publics' need to learn. Daniels and Walker (1996) have rejected this uni-directional view of communication for a collaborative social learning process. This civic discovery of shared values by participants, and social learning goes beyond the traditional "inform and educate" and "impart knowledge" rhetoric involving passive exchange with communities (Wondolleck 1988).

Mutual learning requires each party to be open to learning from one another in an interactive process, gaining knowledge from various sources and perspectives (Daniels & Walker 1996). Counter to past extension efforts of government, partnerships of the future encompass both the government and community exchanging and creating new knowledge. The perception of knowledge as a "fixed quantity external to the learner" (Daniels & Walker 1996, p. 76) as espoused by traditional models of participation, runs contrary to the concept of participation in partnerships for social sustainability. Collaborative learning by active experiential learning allows individuals to draw upon their experience and expertise. Learning is connected to experience. Individuals are speaking from their experiences and participating in tasks – "doing" as opposed to passively observing (Daniels & Walker 1996).

To enable capacity building to occur, participants need opportunities to engage in forums that provide for social learning. Partnerships provide such forums by creating knowledge and developing new meanings. Partners are involved in "deliberate dialogue that respects both the scientific and technical knowledge of managers, and the local knowledge of citizen participants" (Daniels & Walker 1996, p. 80).

Better collaborative learning will occur as a result of partners working together in activities to identify and discuss issues collectively, jointly sharing information and knowledge, and applying their knowledge and new insights to explore options to solve natural resource management problems. This process is designed to facilitate and strengthen relationships between partners, support social learning, and build social capital. Given collaborative learning encompasses a two-way dialogue between partners, Margerum and Hooper (2001) tie the lack of a two-way flow of information to the lack of commitment by participants to implement collaboratively developed strategies. Essentially, the lack of collaborative learning may suggest a crisis in commitment to partnerships by one or both partners. An additional consideration is that commitment to involvement in collaborative processes may not necessarily translate or extend to commitment to actions and end-results.

Advocating empowerment and partnership is no guarantee that rhetoric will be translated into practice, nor will genuine empowerment necessarily result through participation in partnerships (Atkinson 1999). Partnerships create the expectation of equal power relations between participants, but may recreate relations of social, economic or politically-based dependency that perpetuates disempowerment (Atkinson 1999). A focus on greater coordination and synergy, at the cost of disempowerment from competition and other contributing factors, does not progress organising for social sustainability. As aptly stated by Wondolleck and Yaffee (2000), collaboration and partnership are not the “magic bullet” solution to transforming natural resource management, but an added tool to the toolbox which contains scientific, policy and organisational innovations and arrangements.

6.2 Definitions of Partnerships

In many past and current partnerships, the rules of engagement are firmly controlled by the public sector (Taylor 1999). These "rules of engagement" are "conveyed in the ways that partnerships are defined and structured, meetings are run, and decisions are made" (Taylor 2000b, p. 1023). Public-sector partners often place requirements on community partners through predetermined official templates, guidelines or accountability measures. While government guidelines are not immutable, they do tend to "enshrine pre-existing cultures of programme design and decision-making, rather than taking the risk that communities, given the time and resources, may do things differently" (Taylor 2000b, p. 1024).

Constructed Meanings of Partnership

Although respondents held numerous different views about the purposes of partnerships there was a general perception that "*you need a two-way relationship in order to effect change*" [group member - regional]. Partnerships exist to bring about structural or behavioural change. To facilitate this change, partnerships need to be flexible and adaptive.

> In order to go into a partnership - you have to be open-minded. And if you go in there thinking that you have one job to do, without being flexible, partnerships won't work … We're trying to build a structure, but the structure isn't square block [government member - regional].

The meanings ascribed to partnership by respondents varied between the different scales of organising. At the State scale, partnership meant improved organisational effectiveness and better implementation of solutions through a cooperative framework. At regional scale, it was premised on equality and shared actions for synergy and a future cooperative relationship. At the LCD scale, partnership was directed towards

garnering resources and political support. Finally, at the subcatchment scale, it involved investment, resourcing, and risk.

A dichotomy of partnership types is evident from formal to informal arrangements. The form of the partnership may vary dependent on the context and partners involved. Partnerships can take the form of highly structured and legalistic agreements (e.g. formalised written contracts), or unstructured verbal agreements. Also, partnerships can be long-term formal joint agreements, or short term partnerships between stakeholders whose normal interests do not necessitate an on-going working relationship.

Formal partnership arrangements, in the form of written agreements, were the norm for larger scales. These occurred as Memoranda of Understanding between government agencies and statutory councils, and bound parties to adopt agreed processes and undertake specified actions to achieve predetermined outcomes. Formal regional partnership agreements, developed between regional organisations and State government agencies, outline responsibilities and commitments of each partner. Generally, formal partnerships existed where there was financial commitment by one stakeholder, a requirement to meet statutory responsibilities, a formal commitment of stakeholders towards shared outcomes, or a legitimisation of joint collaborative efforts for an external party. At smaller scales of decision-making, partnerships were informal joint operations and collaborations. These partnerships occurred between stakeholders collaborating and exchanging information, and knowledge, in informal settings to promote the common good and pursue funds from external sources.

A feature at most scales was the limited number of non-government partnerships with community groups; suggesting scoping of other partners does not occur, or barriers exist

for formation of partnerships with non-government organisations, including industry. The exception is this study was Gabby Quoi Quoi, where a tripartite partnership involving community, government and industry has proven successful in building commitment to outcomes on the ground (Moore et al. 2001).

When respondents described forms of partnership, they often mentioned "true" partnership. True partnership was defined by a partner's resource contribution and sharing of power, and long term commitment. Both community and government agency members identified such partnerships as full commitment, shared control and equality. Areas of concern included: historical mistrust of government agencies; governments learning to relinquish sole control of processes; and methods for financial accountability. This was evident when farmers from the Gabby Quoi Quoi group spoke of their relationship with their industry partner, Alcoa of Australia, with whom they had an on-going partnership.

> That's been quite a strong partnership [Alcoa of Australia and Gabby Quoi Quoi] and I guess because they've given us money every year and we've had to be accountable. [community member – subcatchment]

True partnership was frequently mentioned at regional and subcatchment scales. An example of true partnership, was State government agencies having equal standing and voting rights to community members.

> A partnership is 50-50 in my book, and that's not what we have … get the acceptance by the group that the agencies are partners in the process … see that as a symbol of success. [government person - regional]
>
> … agency represented as full members to recognise the partnership between agency and community. [government person - regional]

Community members reflected on "true" partnership from a different perspective, where groups become totally independent of government agencies.

> … becoming more of a partnership … for it to be truly successful, it does have to be a true partnership. I think the Ag Department still has a few problems with that. They believe they're leading the show, and I would like to see a progression of the XX Group becoming totally independent, but with members from each of the agencies still committing to it …They [agency] still perceive themselves to be big brother, and all of us sit underneath it. Whereas I'd like to think that in the future we'd all be equal - equal partners. [community member - regional].

While the Blackwood Basin Group are driving towards stronger ties and support from government agencies, the Avon Working Group is seeking a more stand alone position of independence. The Blackwood Basin Group is an example of how trust-based authentic partnerships were used during group development, and then shifted over time to incorporate formal contract-based relationships. Research into non-governmental organisations has found contract-based partnerships more difficult to achieve, as opposed to those built through the formation of trusting relationships (Fowler 1998).

However, at subcatchment scale participants did not consider the Focus Catchment process as a partnership, rather a service relationship. At this scale, participants viewed a "true" partnership between State government agency and communities as a shared venture, with equal commitment, risk and responsibility.

> I think we probably would of worked as more of a team, as the ones [agency personnel] we got to come to the farm had been dragged away from other areas. Like any agency, if you have the knowledge and information then everyone wants you. Just spread too thinly. The ones you really want, you just can't get them as they are all over the place. [community member - subcatchment]

6.3 Types of Partnerships

> Partnership is vital, but the type of partnership is [also] important. [community member – regional]

Three different partnership types were apparent from this study (Table 6.1). The State government-community partnership was present at all scales, and reflects the central

role of State government in natural resource management. Other partnerships included local government and research institutions. Another partnership type that existed, but was not part of the study, was between community groups and industry (e.g. a mining company). This is the tripartite partnership that exists between Gabby Quoi Quoi, Aloca of Australia and the Department of Agriculture (c.f. Moore et al. 2001).

Table 6.1 Partnership Types at the Different Scales.

Partnership type	**State**	**Regional**	**LCD**	**Sub catchment**
State govt – community	X	X	X	X
Local govt – community			X	
Research – community				X

State government-community partnership

An evolving State government role has led to governments partnering communities in landscape restoration and protection through joint strategic planning and management. Indeed, in the United States government, some agency staff have moved back from being the "experts who know best" to adopting roles where "agency representatives become more partners and leaders, and less dictatorial decision makers in the process of successful collaboration" (Wondolleck & Yaffee 2000, p. 130).

National and State government natural resource management policy has sought devolution of responsibility to communities and local decision scales. Regional organising has become a conduit for coordination and vertical alignment of plans (Jennings & Moore 2000). From a community perspective, the functions of State

government range from regulators and information providers, to facilitators of process and joint partners. Often State government agency support persons were identified as being part of the group's organisational fabric, taking on the "face" of the group - "*we support the group, and I think the group sees us as support, and they don't see us as 'agency' as such*" [government person – regional]

State government - community partnerships provided an operating framework for collaboration, which is a structure that Arnstein (1969) identifies with citizen control. Arnstein describes the "partnership" typology of participation as enabling citizens to negotiate and engage in trade-offs with the main power players with the resources. When parties to partnership arrangements realise that efforts of coercion are fruitless, or when parties reach a point whereby they recognise partnership is desirable, they reach a point described as "ripeness" (Burkardt et al. 1998; Susskind & Babbitt 1992). In most of the case studies, one or more of these drivers for partnership existed. For example, partnership at subcatchment scale with the State government offered opportunities for shared investment in implementing land degradation solutions. As asserted by Moote et al. (1997), from a participatory democracy perspective, partnerships require shared decision-making authority between government and community members, within legal and accountability constraints.

Community-government partnerships in the past, constructed around agricultural sustainability, and more recently natural resource management, have predominantly involved Agriculture WA. However, as groups strengthen their strategic approaches to natural resource management, it is anticipated they will form new partnerships with other government agencies and non-government organisations to progress integrated production and conservation landscape goals. The capacity of a single government agency to deliver resources for an integrated natural resource management approach is

essentially non-existent. As external pressure by funding organisations is applied for greater collaborative ventures, integration of specialised skills and knowledge will require multiple partners. Already tripartite arrangements between government, community and industry have proven successful in achieving on-ground natural resource management outcomes (Moore et al. 2001).

Dialogue between community and government agencies promotes cooperation in dealing with natural resource management issues. Partnerships provide a structure facilitating communication and sharing of information. As illustrated by the quote below, community-government partnerships need to foster commitment, and this is driven by communication. Joint membership on groups enables community and government members to engage in intra-group communication that facilitates coordinated action for public good outcomes, and a commitment to mutually cooperate.

> You don't change decisions and opinions overnight. You just don't. No matter what the decision is … There is a process of information sharing; of networking; of collaborating; of working with community. And that is what is going to happen now. They have actually got to see real commitment by government agencies, and leaders from the Soil and Land Conservation Council, - real commitment [community member – State]

For instance, intra-group communication in social dilemmas may induce commitment to cooperate and enhance feelings of group identity amongst other things (Kerr & Kaufman-Gilliland 1994). Securing commitment signals an empowering organisation (McMillan et al. 1995), and attaining empowerment through partnership gives constituents confidence to accept and make changes.

Local government-community partnership

Local government, as the third tier of governance in Australia, provided local communities with partnership opportunities through their statutory membership on

LCDCs. Community members described local government partnership as providing cooperative and supportive “enabling” structures. Both parties valued the collaboration that the partnership provided. Local government involvement was often through both the Chief Executive Officer, and participating Councillors who had an interest in natural resource management.

Research-community partnership

The formation of partnerships with communities by research institutes is an avenue for communication between community members and scientific/technical experts. Partnerships transform the culture of science to one that necessitates and incorporates social processes between the experts and recipients of that knowledge, who are generally local communities. Scientists become part of the planning and decision-making process, as opposed to just their traditional scientific role of delivering research outcomes. Imperial (1999) notes that academics, environmentalists and government managers are becoming increasingly supportive of collaborative approaches involving communities. An example of a research-community partnership is that of a Landcare group working towards integrated conservation in collaboration with a research scientist. Wallatin Creek Wildlife and Landcare Inc. and the Commonwealth Scientific and Industrial Research Organisation were involved in a joint project to manage ecological threats in the context of agricultural production systems by taking a “whole of landscape” approach. Individual farm plans for nature conservation were produced with new conservation direction, awareness of biodiversity issues, and a belief the group was producing a friendlier environment (Jennings & Lambeck in prep).

Partnership with communities gives research institutions access to private land, volunteer resources and local knowledge. Benefits for communities include locally

specific information, access to technical expertise, and greater leverage with funding organisations.

The distinction between communities and research institution partnerships, and those partnerships formed between local and State government partners, is that research institutions are external organisations without membership to groups, and partnerships are inter-organisational. Local and State government partners are active members of groups, and form intra-organisational relationships on which to base collaborations. External organisations have the advantage of being able to form one-off partnerships with groups without on-going investment. The disadvantage for external partners is overcoming problems of access, communication, and process that are important for partnership success (Gowdie & Lambeck 2001).

Partnerships at Different Scales

For each scale, the partnership type (Table 6.1) is described from the perspective of those groups whom the partnership was between, features characterising the partnership, and the activities of the partnership. By outlining the costs and benefits of collaborating at each scale, the incentives and barriers to being part of a partnership become explicit, and can inform negotiation and investment in partnerships.

> Collaboration can lead to better decisions that are more likely to be implemented, and at the same time, better prepare agencies and communities for future challenges … It is a means to several ends … by developing interpersonal and interorganisational linkages, managers can be better informed and make choices about future direction that are more likely to solve the problems at hand. (Wondolleck & Yaffee 2000, p.23)
>
> versus
>
> Collaboration takes effort and can be difficult … not all issues are amenable to a collaborative solution, and some interests may not benefit by participating in certain collaborative efforts. (Wondolleck & Yaffee 2000, p. 48)

State

The partnership at State scale was between the Soil and Land Conservation Council and the State government, which included State government agency representatives from Agriculture WA, CALM, WRC and the DEP (Table 3.1 and 3.2). Partnerships originated through the Council's statutory membership, and the observing government agency participants. The exception was the formal partnership between Agriculture WA and the Soil and Land Conservation Council. This was based on the statutory requirement for the government to provide funds and administrative support to the Council. Reliance on a government agency for functioning created a dependency that had implications for the Soil and Land Conservation Council. Specifically, it required community representatives to maintain good relations with Agriculture WA for continued support. Such partnership dependency altered the power balance.

> [The] Soil and Land Conservation Council has a close working relationship with Agriculture WA, and therefore they are influential … Agriculture WA provide administrative support and funds under the requirements of the *Soil and Land Conservation Act* 1945. [government support person - State]

Under the *Soil and Land Conservation Act* 1945 (WA) a formal legislative responsibility of the agriculture department is to provide administrative support and funds. From such arrangements, there existed a close working relationship between the Soil and Land Conservation Council and the Agriculture WA representative. The Agriculture WA representative was able to exert influence and provide direction. Although statutory based, it was viewed as a partnership, and important for the success of the Council. While there was an imbalance of power against community in this partnership, it did not appear to detrimentally affect the relationship between partners. With future restructuring of Agriculture WA, and abolition of the Soil and Land Conservation Council, concern for the loss of collaboration between community and

government in the absence of any State level partnership was an issue for many members.

Participants identified that the Soil and Land Conservation Council had assisted in improving interagency coordination on issues such as protecting remnant vegetation and managing drainage. They developed working relationships and consulted with State government agencies to ensure policy adoption. Partnership between the Soil and Land Conservation Council and the State government agency had not been smooth sailing, but it had received outward recognition of partnership as the "place to be". Respondents were collaborating.

> … collaboration between agencies. Although there have been some problems, there's also pluses. And they have been working together and forming policy. [community member – State]

The partnership created by the Soil and Land Conservation Council enable the State government to work together to produce Memoranda of Understanding, formal partnership arrangements committing each signatory to specific actions and outcomes. Memoranda of Understanding are used to augment current legislative systems. They are used to implement a "whole of government" approach as opposed to a piece-meal and individual government agency approach. The deep drainage issue was an example of a how a "whole of government" approach was developed through a Memorandum of Understanding negotiated within the Soil and Land Conservation Council (Chapter 3, Section 3.3).

At an informal level, collaboration between the Council and regional groups has formed over the past two years. The Soil and Land Conservation Council has actively supported a forum for regional organisations to progress natural resource management issues. As part of the Soil and Land Conservation Council's strategic focus for future natural

resource management, they are supporting Chairpersons of regional organisations and forming informal alliances to advance natural resource management. By recognising the need for regions to be working together cooperatively, they provide the administrative structure for collaborative arrangements in the way of financial funds, coordination of meetings and guiding input to discussions.

Evident from the interview data was the different views regarding this State government-community partnership. For example, one community member's comment related to the deficiency of partnerships in realising their potential was balanced by another member's comments about the positive benefits.

> But partnerships have not been very strong or very good. [community member – State]
>
> Collaborations … although there has been some problems, there is [sic] also pluses, and they have now been working together and forming policy. [community member – State]

State government agencies were the main partners for both regional partnership and community-led regional groups. These inter-organisational partnerships were not statutorily based. Regional organisations in Western Australia do not have a statutory basis, and therefore they retaining flexibility with whom they form partnerships. The partnerships were different for the government-led and community-led groups. The regional partnership groups only formed partnerships with Agriculture WA, and no other State government agencies. While this partnership was regarded as formal by members, it did not involve written partnership agreements. Partnerships between community-led groups and multiple State government agencies were developed into formal partnership agreements with Agriculture WA and WRC. Formal partnerships were where collaborations were formalised through written agreements or Memoranda of Understanding. These formal agreements gave a stronger basis and permanency to

community-led groups, as opposed to government-led groups, who were part of a Ministerial initiative and prone to any change in political parties. The mandates and scope of these two types of groups are therefore significantly different. Regional partnership groups focused on sustainable rural development in the agricultural sector, while community-led regional groups focused on natural resource management; including agriculture.

Partnerships flourished through the presence and involvement of all partners. Important were attending meetings (a presence), and government members understanding that community members can provide valuable knowledge, insights, and guidance on community needs. The partnership worked by individuals valuing and seeking input from other parties, or "*just by bringing other different perspectives*" [community member - regional] to the discussion table; and by agency members recognising "*communities are experts in their own right*" [government person - regional].

At State scale, the benefits were not mutually shared. Agriculture WA were bound by legislation to provide the Soil and Land Conservation Council with administrative support, and incurred a cost that outweighed their ability to influence the group. While the other State government agencies exercised influence over the Soil and Land Conservation Council, they did not incur any cost. On the other hand, the group allowed community member to direct policy-making, but the downside was that change was slow. It also required an on-going investment of time and energy to identify suitable options, and implement suitable procedures.

> The downside is … you don't change decisions and opinions overnight. You just don't. No matter what the decision is on anything. [community member – State]

Regional

Partnerships at this scale had a number of different purposes and associated expectations for financial assistance, including:

1) Shared programs, ideas and appreciation of roles

> Mutual programs and ideas … appreciation and understanding of roles. [government person – regional]

2) Integration through collaborative sharing and learning

> Not looking at cross-purposes – move to looking at integration … synergy. [government member - regional]
>
> Relationship built on understanding, and extended through collaborative sharing and learning. [community member - regional]
>
> Having synergy and cross-fertilisation. And challenge from outside to prevent groupthink. Innovative and challenging. [community member - regional]

3) Cooperation for a secure future

> Build relationship between key players that secures the environment in which the group wants. [community member - regional]

4) Equal decision-making rights

> Shared rights – voting rights – recognised as a partner. [government member – regional]

Members of community-led groups perceived good groups as those with connections to a wide range of partners – "*a linkage in the community, business, environmental bodies and private enterprise*" [community member – regional]. Members of the regional groups commented that they were not effective in developing or sustaining collaborations, or in initiating working relations with partners other than State government.

Regional partnerships were directed towards achieving a balanced and shared control between parties, with financial independence for the group. Concepts like autonomy[4] and self-reliance[5] are associated with the independence sought by regional groups, and ultimately organisational empowerment through such attainment of control. As an instrument of power, control was through the regulation of information, the holding of resources (money), and the ability to construct barriers to participation.

> It [balanced shared control] is definitely a direction that we're heading towards - is a true partnership between all the groups. And at this stage, there would be very few community groups or agency people that are mature enough in their thinking to set up a true partnership at this moment. [community member - regional]

Imbalances in power were a feature of partnerships at this scale. One community member described the relationship between the government and community as "*parasitic*", with the community "*trying to extract resources and giving as little back as possible*" [community member - regional]. In the Blackwood Basin Group, this one-sided relationship was described as follows:

> Community and agency – [the] community wants money but [it is] not prepared to give the agency a vote. [government person - regional]

However, there was widespread support for government agency members having equal standing to community members.

> … agency part of decision-making and should have vote – vital to have working relationship. One of our strengths. [community member - regional]

Regionally based government-community partnerships are a means of empowerment for local communities and their members by the gaining of autonomy (Jennings & Moore

[4] Autonomy is an essential part of community-based approaches, allowing communities the control to design and manage their own affairs (Ife 1995).
[5] Self-reliance (encapsulating self-sufficiency) derives directly from sustainability, by supporting the development of structures that are able to be maintained over the long-term (Ife 1995). In a regional natural resource management context, it means regional groups minimise the extent to which they are reliant on government funds to function, and are beholden to government.

2000). A recognised feature in the South-West Regional Partnership Group and Avon Working Group, was State government agency helping communities to take leadership and control. The following comment by a community member is illustrative of the development of trust, the recognition by government of community's capabilities, and creation of an organisational environment that is empowering:

> … effectively letting a group of unknown people have some power … supporting those people in helping them to make decisions, without necessarily being too directive, and actually participating in that free and frank exchange. [community member -regional]

Partnerships offer an avenue for shared power between State government agency and communities. However, Graycar (1981) is sceptical an equitable distribution of power between partners is realistic, given power imbalances exist between government representatives and community members. The notion of power residing with those who hold knowledge is also associated with those who hold the funds, who has the majority vote in community-government groups (Jennings & Moore 2000), and who has legislative power. In regional groups, the formation of partnerships and the associated changes with collaboration, specifically trust and commitment, has resulted in relationship transformations between State government agency and community members.

Establishing partnerships was guided by three considerations by partners: What are the common goals? How can we work together to achieve these goals? How can resources be best allocated to achieve our goals? An excerpt from the Blackwood Basin Group's Business Plan reflected this need.

> The Blackwood Basin Group could not operate without the cooperation of our partner agencies, and has important partnership agreements with State agencies. These relationships, and the range of activities conducted jointly, are vital to the Blackwood Basin Group's ability to deliver on-ground change and vital to the agencies' implementation of regional strategies. (Blackwood Basin Group 2000, p. 18)

The value of partnerships at the regional scale between government and community-led organisations was recognised with the development of regional initiatives, and communities recognising their limitations. Similarly, government's view corresponded with that of the community.

> We are not capable of doing the things they are. [government agency]
>
> And they've got the resources. We haven't got any resources. [community member - regional]
>
> … agency vehicle for [the] group. What we can do together, and what we do for you, and what you can do for us. [government person - regional]

The development of regional strategic plans by community-led groups (Chapter 3, Section 3.3) led to formal partnership agreements between regional groups and State government agencies such as Agriculture WA and WRC. The process of developing regional strategic plans provided the platform to further progress these partnerships.

> The regional strategies for natural resource management that is being developed - it does provide a mechanism for enabling that collaboration. And people are starting to draw up clearer agreements now about what they are going to do, and what some partnerships are about … That is what our strategy is: develop partnership agreements. [government member - regional]
>
> I've initiated a process of sitting down with each of our partner agencies and working out what are our benefits for each other, what are our common aims … This is a draft memorandum of understanding with Agriculture WA … What are the features of the Blackwood Basin Group? How are we a benefit to Agriculture WA? And why should they support us, sort of thing, and what can we do here? … The next section we decided, well, "how do we actually make that work?" It is all very well to say that we can be an ally, or provide credibility, or give out Agriculture WA messages. But, we've also actually got to make sure we actually do it. So, the relationship management is a great process … This process has been great in terms of, rather than having a random process … it is actually really thinking it strategically: "what are you doing for us, and what are we doing for you, and how can we do it better?" … Actually making a real relationship that is working … really focused on this relationship management idea. [project manager - regional]

The advantage for State government agencies forming partnerships with communities is access to federal resources and community organisations. Regional groups provided a forum for agencies to explore joint actions through regional organising. Regular

meetings provided government and communities with the opportunity to formulate plans for action towards shared goals.

> We're all really working for the same end. We might be going about it differently, but we are actually working towards the same end. [community member - regional]

Government – community partnership was fundamental in the development of the zone concept in the Blackwood Basin (Chapter 3, Section 3.3). The Blackwood Basin Group, composed of agency and community representatives, identified the problem and options available. Working together they developed a strategic approach to coordination across the region. It was a recognised fact that the zone process would probably not have existed without government involvement.

> The zone really came out a partnership … a 3 way partnership between DEP and Agriculture WA and the Blackwood. [government member – regional]

A significant shift over the past decade has seen community-led organisations form strong partnerships with government. Now independence from government is perceived as a weakness. During an Avon Working Group meeting, and during discussion of a joint funding application, the question was posed *"Does the group want to go into partnership with Agriculture WA?*" One community member's realistic response was "*Can we afford not to be in partnership?*" Many regional community members held the view that to implement the regional initiative, stronger ties with State government were vital for achieving desired outcomes in the region.

> While it was a great rallying point at the beginning … a strength at the beginning [group's independence from State government], now being our weakness is our independence now. With a $13 million initiative … although the four agencies are there, there's no bind, there's no cement … we haven't got binding agreements with people. And if it had been an agency led [group] then we would not have gotten the community support, but we got the community support … [we are] campaigning now to get the agency involved … We've got the ownership so entrenched there, it wouldn't worry me now if an agency is to actually run it [the regional group] now. [community member - regional]

The regional planning process by both community-led and government-led groups has brought about regional collaborations between government agencies more rapidly than if the community groups had not acted as a catalyst. The planning process assisted individuals and groups to identify with other groups within the region, and learn about other plans. Activities external to the decision-making process, such as internal networking within government agencies and informal networking with potential external partners, were viewed as important in progressing strategic plans. Such activities involved "impression management" to show leadership and establish credibility with other organisations. For many participants the value from regional planning was the collaborations initiated in the process.

> That [regional] plan helped everyone realise that those collaborations were really important to help implement the plan. [community member - subcatchment]
>
> The regional strategy for natural resource management that is being developed, - it does provide a mechanism for enabling that collaboration. And people are starting to draw up clearer agreements now about what they are going to do and what sort of partnerships are all about. So, sort of having the skirmishes early, rather than sort of letting people assume things are going to work. [government member – regional]

Stakeholder interactions within regional groups changed as a result of new partnerships. For example, in the Avon Working Group, State government agencies in addition to Agriculture WA were coming to the fore in identifying synergies with communities, and increasing their stake in the group. These regional partnerships expanded to include new partners.

> Where Agriculture WA has been the leading influence in the initial stages and now I think the other agencies … understand that it isn't an Ag Department group. It is more of a community and government partnership. And they're prepared to have a lot more say, and you see their managers having more say, and even challenging [the] Agriculture Department. [community member - regional]
>
> Seeing changes too where Agriculture WA has been the leading influence in the initial stages, and now I think the other agencies have certainly felt that they have. I think they understand that it isn't an Agriculture Department

> group. It is more of a community and government partnerships. [government person - regional]

A number of respondents commented that it would have been useful to build partnerships between regional groups, but that competition for funding made this difficult. Regional groups rarely focused on areas of synergies with other regional groups. They tended to focus on disagreements over extraneous issues rather than on commonalities.

> They don't agree on this, that, and the other, so they work on nothing … The differences have been allowed to stop any work rather than identifying them, and putting them to one corner, and saying "here's our areas of mutual agreement" and work on those. [community member - regional]

Collaboration with other regional groups would allow the mobilisation of activity across several regions to pursue common issues with government through collective organising, or as stated by one respondent to "*put a critical mass of energy towards [government]"* [government person – regional]. The trend towards politicalisation of organising regionally appears the result of federal government's regionalisation process. If turf protection could be overcome, strategically, the collective action of the regions was perceived as greater than individual regions acting independently.

> … a need for strategic alliances, and not individuals trying to protect their own patches. [community member - regional]
>
> Develop alliances with other regional sized bodies to present a force on issues (tax deductions, public versus private good). And build strategic alliances to build political power. [government member - regional]

The government-led regional groups used financial inducement to form partnerships with industry groups. One successful outcome for the South-West Regional Partnership Group was a joint project with the horticulture industry group located within the South-West geographical region, focused on scenario planning for sustainable industry

operation. Such partnerships at regional scale were strongly influenced by, and based on, receiving direct financial benefit.

> Buying in to partnership with industry groups and buy into partnerships with agency groups such as Development Commission. [community member - regional]

At regional scale, the benefits of partnerships were two-fold. Firstly, partnerships built internal organisational capacity, and secondly, they were able to better influence government agencies and other external parties. Joint projects enabled sharing of resources, skills and shared risk. The ability to influence outside of the group's normal decision-making boundaries enhanced opportunities. The quality of partner interactions determined on the group's ability to influence outside of the group.

> Our ability to influence other groups is going to get down to how well we can work with them. [community member - regional].

In the regional cases studied, communities and governments valued partnerships. Each partner gained from the arrangement, whether it was resources or access to networks, and viewed partnerships as a strength. Through collaboration comes an enriched understanding of values, ideas and issues that exist within communities, and provides government with a complete picture of communities. These outcomes provided enhanced capacity for State government agencies to deal with problems, by using a larger base of information, and securing communities' support through credible and legitimate decision-making. One illustrative comment included:

> A lot to gain from such good access to the community … role of the community in the decision-making process is the biggest component … has to be community led and strong government and industry input into it to help make those decisions. [government person - regional]

The wider benefits of partnerships for future sustainability included improved funding advantage for community organisations, State government access to federal funds, and

influence on communities through community organisations. Government were able to use a chain of influence to have their agendas and ideas progressed through regional and State organisations, and cultivate a positive political image associated with community organising.

> Partnerships have improved their successful funding applications … Association with organisations makes it look better to government in handing out dollars. [external person - regional].

The cost of partnership was also a barrier, with resource requirements of energy and time on the part of individuals and organisations. Overcoming obstacles requires being strategic in forming partnerships in terms of investment for return, the duration of relationship (short-term and one-off project) and future opportunities for collaboration. The problems of providing time, money and personnel are cited as major constraints to collaboration (Wondolleck & Yaffee 2000). The financial investment in forming partnerships was a disincentive, and a burden at a time when staffing and budgets were decreasing, while workloads were increasing. Often one partner carried the financial cost of partnerships, both in formation and maintenance. Over the long term this may prove to be a disincentive for continuation.

LCD

The partnership formed at LCD scale was between government (State and local) and local community members. Membership was statutorily determined, thereby predetermining the partnership members. Respondents indicated local government were a strong partner due to their continued presence and support, active involvement and financial input. They offered long-term support, had a greater vested interest in the LCDC, and a stake in the outcomes.

> The LCDC, I suppose, was supported from the Shire Council right from the offset. They made it their business to support it, and get it going, and have continued to support it in a quite a varied way. [community member - LCD]
>
> [Agriculture WA is] working with us so we can inform them, or seek their assistance in terms of technical advice. Same as WRC, although they are not represented on our committee, but we certainly have a partnership … local government is probably our strongest partner. [community member - LCD]

Partnerships were defined from various views by respondents, sometimes from a black-white perspective of either conflict-cooperation, or as an "enabling" and supportive arrangement, and the "vehicle" for achieving mutual goals.

> It will either go back to the people deciding their own destiny, and individual farmers doing exactly what they want on their land, or it will go where we've got some sort of cooperation between groups and farmers and agencies, and the thing is done on a cooperative basis rather than a confrontationist basis. [community member - LCD]
>
> I think, if you have that [direct link or direct cooperation] between the LCDC and the council, it enables. [local government member - LCD]

LCDC partnerships with State government agency functioned predominantly through the Commissioner's Nominee who was a member of Agriculture WA. Partnership activities were limited to sharing of information when the need arose, with State government benefiting from access to communities for feedback on draft policy documents and natural resource management issues, and the dissemination of information to subcatchment groups. They were often a "silent" partner witnessed by their absence at meetings, or limited participation in discussion. Agriculture WA had a historical linkage with LCDCs, given their support role with the Soil and Land Conservation Council, and legislated membership. While the government representative for the Goomalling LCDC was an absent member who was informed through meeting minutes, the Dumbleyung LCDC had a number of different representatives from Agriculture WA attending over the years, with varying levels of involvement.

> We had a range of people just popping up and sitting there for three hours - not saying anything … one bloke fell asleep. [community member - LCD]

While LCDC activities were not a priority area for Agriculture WA, the State government agency was kept informed. Communities were able to seek assistance and technical advice from State government.

> We can't live without agency. We need them for technical advice and support, and they need us to achieve their goals. [community member - LCD]

In the Dumbleyung LCDC, partnership was problematic because of conflict between Agriculture WA and community members of the LCDCs. Difficulties originated from historical mistrust based of government based on past experiences, with poor performance and contribution to group meetings, and conflict in decision-making. These difficulties became apparent and problematic when deep drainage was considered by the group (see Section 3.3 for detailed discussion of this issue).

> They've lost their trust in the agencies just from the work that they [agency] were doing behind the scenes; without coming up front to the committee. [community member - LCD]

Partners need to create the conditions for future collaborations to be fostered (Tuler & Webler 1999). Preserving partnerships by government agencies involves building commitment, and consistent participation of government agency representatives. State government agency's poor participation at meetings, and involvement with minority groups outside of group meetings, threatened their relationship with the whole group.

A further problem was the negative interactions between communities and government. Sources of conflict existed not only between government agencies and communities, but also between different government agencies. Inter-agency conflict negatively impacted on the community's ability to take a collective approach to decision-making, and to instil confidence and trust in government (Jennings & Moore 2000). Trust is a key to democratic participation, and without trust cooperation relies on systems of formal rules

and regulations (Fukuyama 1995). Therefore, instead of presenting a "whole of government" approach through integrated planning and management, a negative impression was created by government agencies' problem in working together and the declining environment of trust.

> We all work together: CALM, Agriculture WA, - the whole lot. But there is so much infighting that goes on between the departments … You can't have much faith there. [community member - LCD]

At the LCD scale, the benefit of a collaborative approach to solving land degradation was the pooling of collective resources to tackle landscape problems. Access to technical advice from within State government agencies to inform decision-making was an advantage for communities. Achieving inter-agency cooperation, however, was the hurdle, with competition between agencies over funds often igniting turf wars.

Subcatchment

Partners at this scale included the community, State government, and research institutions. Partnership was - "*a win-win for all parties – definitely a partnership*" [agency member – subcatchment]. Delivery of information was the principle objective of this partnership, with regulatory information, management options, and specialist contact information sought.

All three subcatchments studied were selected as Focus Catchments, where community-government partnerships were premised on a "shared investment" approach (Chapter 3, Section 3.3). This approach parallels the government supported leadership, identified in Chapter 5, and is aided through leadership by self-determination. This comment by a State government agency member illustrates this point:

> Government agency have to be strongly involved, but at the same time they have to let the community come to those decisions. [government person - subcatchment]

All partnerships associated with the Focus Catchment process were informal, with no partnership agreements being entered into, nor any overarching statutory requirement for partnership. The voluntary basis of partnerships at this scale was beneficial because it did not bind communities to meet government requirements to implement specific land management plans.

However, acceptance and involvement in a joint process, such as the Focus Catchment process was, viewed as establishing a partnership. Community members voted on becoming a focus catchment after they had been introduced to the focus team, informed of the process, and given the opportunity to discuss any concerns. However, the meaning of partnership was not singularly determined by the process, but by what was gained from the interaction. Investment of resources, full commitment and delivery on promises was essential for partners to feel satisfied with the partnership. The distinction made by community members between government providing a "service" to the community and a "partnership" was that partnership was based on actual beneficial gain and the provision of information/assistance to a farmer that was of value. The provision of a "service" from government was valued by community group, but many sought greater commitment and investment by government. The distinction between a "service" and "partnership" was evident by one farmer's remark.

> A partnership is what they first called it when they started … It came down to a service they put into the catchment … Because they haven't given us the full commitment of what they originally said they were going to. [community member - subcatchment].

Many community participants did not perceive the Focus Catchment process as a partnership. Similarly, members of the focus team viewed it as a "service" they were

providing to communities. Partnership as defined by communities involved current and future factors that included: supply of support and expertise; future involvement through catchment demonstrations; level of input; financial assistance; ownership of joint products; shared investment; and a level of mutual obligation.

While a few community members perceived the Focus Catchment process as a partnership between Agriculture WA and communities, the meaning of partnership was viewed by one community member as "*Agriculture WA are going to get shares out of our crops*" [community member - subcatchment]. Other members recognised that while a partnership may exist, it wasn't strong. This diversity of views was held within each subcatchment group.

The Focus Catchment process as a partnership was recognised as problematic for three reasons. First, State government structured the process as a uni-directional flow of information. Second, they presumed government as "experts". Finally, the interaction between the landholders and government was not really a partnership in the truest sense of the meaning. The process situated government persons in the position of one who "knows best", understands fully, or has all the answers (Daniels & Walker 1996). This approach created numerous problems between subcatchment members and State government personnel, and was interpreted in many ways.

> If agencies are going to set up partnerships with the community groups, they have got to respect community groups to have an equal input into any sort of decision-making process or activity that goes on. And that means full consultation with the farmers, and also making more of an effort to respect the farmers and their decisions. And respect the farmers' ability to know their area better than they do. So, if the agency staff go out to visit a farmer, then they have got to respect that they are in territories that the farmer knows better than they do. [community landcare coordinator – subcatchment]

Community members identified the discourse used by some government agency personnel as patronising, and not fostering a collective community-government approach. At times, government agency personnel did not reflect a strong group identity in the Fence Road Catchment group. Discussions by some government agency personnel often made the community ("them") rather than the collective ("we"). Generally, individuals place a higher utility on the collective when one has a strong sense of group identity (Kerr & Kaufman-Gilliland 1994). As Atkinson (1999, p. 62) indicated, "the usage of language is rarely a pure act of communication, it almost always occurs in a discursive context reflecting relations of power and domination." Given this context it was not surprising community members indicated concern over the relationship between government and community members, and the respect afforded to communities. Building relations would seek to transform the "them" to "us".

> [The] only way *they're* going to solve the problem, - achieve that water balance over the long term, is for *them* to work as an integrated catchment. And unless that happens, - it's gong to be fairly much unattainable [government agency person - subcatchment] [emphasis added]
>
> I think it is a bit patronising. Like that notice that was sent out to the farmers. It was a little lecture. It was about the bus trip and the lack of participation. [community member - subcatchment]

The concept of "shared risk" or "burden sharing" in partnerships can promote a sense of fairness and strengthen commitment to the interaction and outcomes (Yaffee et al. 1997). In the Focus Catchment process, Agriculture WA did not share the risk with farmers, were not providing long-term investment or involvement, and did not foster strong relations with the group. Involvement in partnerships with community needs to build on good relations, a supportive presence, and joint financial investment. This is particularly important when there is risk (carried by one partner) and a long lag time in obtaining benefits.

The partnership between the Commonwealth Scientific and Industrial Research Organisation and the Wallatin Creek Wildlife and Landcare group members was similar to the Focus Catchment process; voluntary and informal. The nature of the project undertaken by researchers with the Wildlife and Ecology Division was pure research, which was later extended to involve the subcatchment group to implement landscape nature conservation recommendations. In both of these activities, the arrangements were viewed by the community members as failing to represent the full commitment of both parties.

> No, I think it is just that they came around as a service, more of a service rather than as a partnership. They were giving their advice for you "to do what you wanted to do". But with no real commitment for them to say that they will come back and see how things are going in three months, or whatever. [community member - subcatchment]
>
> There was some commitment from the Commonwealth Scientific and Industrial Research Organisation's Wildlife and Ecology to work with the [sub]catchment. There was no official partnership drawn up, and I guess if that had been done it would have taken it to sort of a higher level. Where there was a real commitment done by the landowners and a real commitment done by that particular organisation, then things would have progressed along probably a lot better than they did. [community member - subcatchment]

For partnerships to function effectively, Taylor (2000a) suggests actions need to be directed to building capacity in partner institutions, as opposed to continuing to assume a skills deficit lies within communities. An illustrative example of this involved the Commonwealth Scientific and Industrial Research Organisation -Wallatin Creek Wildlife and Landcare Inc. partnership, which adopted a traditional science-driven approach. On reflection, several institutional problems were identified, and many of those problems lay with the experts and the process used to engage with community (Jennings & Lambeck in prep). The problems included: inadequacy or inappropriateness of the information available; inadequate communication; differing expectations on the part of scientists and landholders; and institutional impediments to delivering appropriate outcomes. While the decision-making process surrounding nature

conservation on production lands was not as successful as first visualised, it provided benefits to the group, and instigated other collaborative opportunities. Wallatin Creek Wildlife and Landcare Inc. is now a partner group in the "Living Landscapes" Project; a joint project involving community, a non-government conservation organisation, government agencies and a corporate sponsor. The project takes a community participatory approach to nature conservation planning across production landscapes, and builds on the work of Landcare at the subcatchment scale (c.f. Gowdie & Lambeck 2001).

Much of the discussion in this section has focused on the partnership with government agencies. A few brief comments on the relationship between community members at this scale follows. At subcatchment scale, landholders worked collaboratively to achieve on-ground outcomes, such as water management. These collaborations occurred in an *ad hoc* manner, and out of necessity to address land degradation problems extending beyond individual farm boundaries. The attitude expressed was "*We work together. We just do it*" [community member - subcatchment] and "*working with each other when a problem develops, say with cross boundary work*" [community member - subcatchment]. Viewed as partnerships of opportunity, such arrangements were generally of a short-term nature, mutually beneficial or of no negative impact, and involved joint activity to address a single land degradation issue. The conduit for on-ground cooperation was through involvement in sub-catchment groups.

> The group provided the vehicle to that sort of work [cross boundary], and get more involved in cross boundary stuff and general catchment stuff. And plus learn from other people [community member – subcatchment].

Subcatchment groups were perceived by some as a partnership between communities – "*it's a partnership of people of just within the group*" [community member – subcatchment]. An example of collaboration for sub-catchment scale benefit involved

cross-subsidy between farms, which occurred across farm boundaries by farmers passing on a proportion of their government money to assist other landholders implement on-ground actions. This process operated on the belief that landscape wide benefits would result from targeting problem areas within the sub-catchment. Farm level partnerships at sub-catchment scale were seen as integral in achieving sustainable agriculture outcomes, as asserted by a government representative.

> … farmer to farmer partnerships. They're really integral. Perhaps more integral than the agency-farmer partnership in terms of making sure things happen … [it is] one of the underlying factors whether we can combat this problem effectively [government agency person - subcatchment].

At subcatchment scale, partnerships improved the organisation's capability by building new networks, and providing access to existing networks through organisational linkages and people links (cross-representation). The established networks of one partner were used for more effective delivery of benefits to groups. For example, Wallatin Creek Wildlife and Landcare Inc's collaboration with the Commonwealth Scientific and Industrial Research Organisation allowed new opportunities for further partnership opportunities with other external agents.

> Partnerships are starting to help in terms of bringing in more useful information to the group …more in the background than it is with direct involvement with the group … talking with CALM … talking with Greening [Australia].[external person - subcatchment]

The proliferation of partnerships at local to State scales risks "network fatigue" (Lowndes & Skelcher 1998), through the increased strain on community groups' limited resources and capabilities. The unaccounted cost of pursuing effective partnership, strong social structures, and interactions across regional and subcatchment scales is burnout by community volunteers and government agency personnel (Byron & Curtis 2002a). Maintaining partnerships was found to add another layer of organising, over and above operational group functions. The cost of partnership was the overwhelming

demand on volunteer time, and the continuous demands on individuals to attend meetings. As mentioned above, a common feature of voluntary community groups is volunteer burnout, and this is exacerbated through partnership demands, which ironically are initiated to increase resources.

> It [collaboration] is the only way to have the linkage, but it is going to get to the stage where those people are going to get burnt out. There is going to be problems there, because they won't be able to spend all their time coming to meetings … they're asked on to do other activities, and subcatchment coordinators are drawn in to be asked to volunteer their time. [community member - subcatchment]

6.4 Desirable Attributes of Partnerships

Desirable attributes were categorised as either process- or outcome (substance)-related (Table 6.2). Gardner (1989) used a similar categorisation in her sustainable development work. Process attributes related to how partnerships formed and functioned. Substantive attributes relate to the end products partnerships. As noted by Gardner (1989), the division of attributes is not definitive, nor should either type of attribute be regarded as pre-eminent. The descriptions given in Table 6.2 for the desirable attributes of partnerships were drawn from the analysis of the interview and participant observation data.

Table 6.2 Desirable Attributes of Partnerships for Social Sustainability.

Desirable Attribute	**Description of Attribute**
PROCESS	
Valuing other partners	Recognise the value and need for collaboration with others.
Building trust, commitment and confidence for shared outcomes	Forming good relationships and open interactions with others.
Integrating through supportive structures and networks with other groups	Networking and communicating broadly, to identify new opportunities for synergy with others.
Participatory with conflict resolution mechanisms	Active involvement and interaction with others in a non-conflict environment.
SUBSTANTIVE	
Increasing resources and capacity for self-reliance	Improved group empowerment through strengthening group capacity.
Increasing political influence	Greater outward influence through collective voice and strategic alliances.
Opportunities for collaborative learning	Interactions for sharing information and building new knowledge collectively.
Sharing control for a fair distribution of power in decision-making	Sharing of control, responsibility and risk by partners on an equal basis.
Opportunities for community leadership	Actions from collaboration that assist the community to take the lead.

PROCESS ATTRIBUTES

Valuing other partners

Vital for the formation and success of partnerships is the recognition by partners of the value of other partners, and the necessity for collaboration to achieve results. Role definition, and the communication of roles by participants in partnerships is crucial in

developing a shared understanding of each partner's role and boundary of responsibility. Good communication between partners to reach mutual agreement is essential. Groups value other partners by knowing what they want, where they are going, and how they are going to achieve outcomes.

> … sharing resources and outcomes and not be in competition … appreciation and understanding of roles … strongly believe future success depends on close and effective working relationship. [community member - regional]
>
> I'll say this is the community contribution, and this is my contribution. And these are the milestones and tasks attached to that, and they're one project … [government member - regional]

Partnership as a mutually reinforcing process, whereby partners are involved in key steps and receive external recognition for their contribution, requires positive benefit for continuation. The decision-making process needs to create a satisfying environment, and craft meaningful relations to sustain future collaboration. Partnership has to be presented as positive, and the value continually advocated, even at times when costs outweigh benefits in the short-term. Consideration of relational quality, an elusive but important concept, depends partly on the personal bonds between partners, on their trust in each other, and on the broader reputations of partners for fair dealings (Arino & de la Torre 1998).

Building trust, commitment and confidence for shared outcome

Trust, commitment and confidence were terms repeatedly expressed at most scales. Each of these terms has social characteristics and multiple dimensions, some of which were recognised by respondents. Many respondents implied that trust was based on character and competence – trust to do the right thing, and the knowledge and abilities to perform their tasks. Trust, as an outcome of joint engagement, was the foundation for continued partnership.

> There is [sic] some LCDC members that probably wouldn't ever trust the agencies again. It has got to the point where they have lost their trust in the agencies just from the work that they were doing behind the scenes, without coming up front to the committee. [community person – LCD]
>
> … important to have a human face out with groups, and a consistent face … consistent role and it leads to trust. [industry partner - subcatchment]

A challenge confronting the formation of partnerships, is overcoming the mistrust barrier and self-interest orientation. Trust is a behavioural construct, and consequently in attaining trust the individual has to identify with fellow group members. However, it is not in an individual's or group's self-interest to collaborate if the payoff received is negative (Wiener & Doescher 1991).

Social interactions build relations and foundations of credibility, and with this comes trust as participants get to know each other. Transformation of the relationship arises from frequent face-to-face contacts, including: meetings, field days, workshops, farm visits, etc. The role of the interpersonal characteristics of partner representatives is important for partnership success. Specifically, Alder and Schroeder (1998) state this is about having people who are trustworthy, open to sharing visions, and flexible to negotiating mutual goals. The level and quality of contact between government personnel and community members were found to be hindering construction of trusting relations, as indicated by this comment:

> We didn't really establish a high level of rapport with the group … improve the rapport … likely to share ideas with you, if they feel they can trust. [government person - subcatchment].

Mistrust of agencies and fear by communities of losing control were frequently expressed at each scale. Comments made by respondents during interviews and group meetings made it clear communities had mistrust of government agencies. This mistrust and the early struggle for community's inclusion in decision-making were impediments

blocking the current decision-making environment. Historical mistrust from previous negative experiences has been found to impede decision-making (Wondolleck & Yaffee 2000). Concerns expressed by participants indicated a perpetuation of mistrust, and a fear of losing control.

> Most definitely, they don't want agency to have control … they don't want agency to take us over … people have always had that fear … of agency department taking us over, and I would have to agree. [regional manager - regional].

Although mistrust was evident in most groups, it was expressed more from community members in community-led groups, as compared to government-led (regional partnership group) and statutory groups (LCDCs and Soil and Land Conservation Council). Fear, manifested as a loss of trust, occurred more often than concerns of losing control. This suggests communities believe agencies hold some power, and are able to exert influence in decision-making.

Cooperation and collaboration entails mutual trust between partners to make decisions by consensus for a shared outcome. The process requires the presence of credible participants displaying competence, regular contact, quality information exchange, and resolution of conflicts. These were many of the attributes for representation identified in Chapter 4. Trust between partners through a process of building relations adds value to collaborative activities. An example of this process occurring was at regional scale between the community-led regional group, the Blackwood Basin Group, and State government agencies that worked collaboratively with the group to develop the zone concept. Relational capacity is created as social relationships develop through deeper trust and respect. It is these positive social constructs that facilitate access to needed resources and promote partner commitment, satisfaction and sustained involvement (Foster-Fishman et al. 2001).

Commitment and confidence subsequently flow on from trust. Commitment is seeking a course of action and staying with it, and confidence is full trust or belief in an action or person. Commitment can define the form of interaction between partners, as illustrated by the following comment:

> A partnership is what they first called it when they started. A partnership between the agency and the catchments. But, yeah, I think it came down to a service that they put into the catchments, because they haven't given us a full commitment of what they originally said they were going to do… they were giving their advice for you [emphasis added] to do what they [emphasis added] wanted to do. But with no real commitment for them to say that they, "will come back and see how things are going in 3 months time". [community member – subcatchment].

Commitment to participate in decision-making, and to form partnerships, was expressed in numerous ways by different actors. An example of commitment by government was a regional manager committing his budget funds for three years, and providing staff to assist a regional group. The image of agency has been viewed, to some degree, as "*driving a government agenda … just trying to get our own ends*" [government member – regional]. However, involvement in partnerships and building commitment has slowly changed community perceptions of government, by realising similar goals and outcomes are being sought by all.

Confidence was perceived as having the skills and ability to competently effect change. Confidence in ones self and others to achieve shared outcomes was gained by perceived expertise and trustworthiness displayed in the decision-making process.

> A mutual confidence in each other that we'll actually get these things done, and then we will deliver a bigger result than if the agency of the community did it themselves. That should be what we're aiming for, and that's essentially the future - the way it is. [government member - regional]
>
> The benefits are to share knowledge, or to gain more knowledge … that is the main reason we go to agencies for support - is to get their technical advice … heavily reliant, particularly in the early times, on people with a knowledge of the process to help us keep on track. [community member - regional]

In an equal partnership, achievements are jointly shared, and not exclusively claimed by one partner. When shared recognition of outcome was not forthcoming, or the partnership itself was not acknowledged, problems of trust and commitment arose. This finding was observed during meetings to introducing the zone concept in the Blackwood Basin.

> Why do we do everything, and you want the glory all the time … where is the partnership here? [government person -regional]

Accountability is often a call for confidence in shared outcomes. Tension is created within partnerships when government, because of their mandates, are held accountable for investment of funds into projects (Michaels 2001). With the exception of the Natural Heritage Trust's reporting mechanisms for regional groups, there were either little or no such requirements on non-governmental partners (e.g., community groups) to be accountable to other partners. In this study, a clear understanding of government agencies' reporting and accountability requirements, and their operating constraints, was not apparent to non-government members.

Integrating through supportive structures and networks with other groups

Communication by the case study groups with other groups, at each scale and across scales, builds awareness and understanding of the larger picture. Forming linkages for horizontal and vertical integration between groups, as a basis for collaboration, was explicitly recognised by group members as essential but currently lacking.

> That has been a criticism. That there hasn't been adequate interaction amongst the different groups. In effect, we tried to do that on various occasions. We were asking them in … our group has expressed the keenness that, that interaction happens … but people just haven't been prepared to invest the time in doing it … if we want it to happen, we have to make it happen … I actually don't think we've recognised the importance. We haven't consolidated good links. [group member - regional]

Building relations across organisational boundaries is difficult, and relies on active individuals, good networks, and joint meeting opportunities. Communicative groups networking with individuals and groups outside of their boundaries of operations allow the discovery of new opportunities for collaboration. In several cases, key individuals within groups used their networks to proactively seek new partners and opportunities for synergies. However, this approach was problematic when groups had a restricted scale and network focus. Community groups at all scales did not look beyond traditional partners (e.g. government agencies) for strategic partnerships with non-government organisations and industry. Opportunities to establish collaboration between groups through cross membership were often missed, because individuals failed to facilitate information exchange and broker joint discussions. Two common concerns expressed by individuals were the narrow focus of groups, and the low level of cross-scale interaction. These problems occurred at all scales, and did not assist in facilitating collaboration.

> Who else have they engaged with? … probably not many other groups … that in itself is a problem for the group. [scientist - subcatchment]
>
> Even though we've got cross membership, we've got poor relations with XX group. And no means of formal communication between the two groups, at all … each respective group doesn't have a clue what each group does, which is a pretty hopeless situation. [government member – regional]

As partnerships are formed, better access to information occurs through networking between partners, and gaining access to their established networks. An example of this was Wallatin Creek Wildlife and Landcare Inc. members obtaining contacts to further nature conservation through partnership with the Commonwealth Scientific and Industrial Research Organisation. New partnership arrangements enabled group members to expand their areas of policy, planning, or management influence with government and communities (Jennings & Moore 2000).

Inter-organisational partnerships between regional organisations were problematic due to being "*seen as challengers … competitors for funding*" [government member - regional]. Collaborations between regional groups required what several members described as "synergy".

> Breaking down the barriers between regions … tapping into the synergy that can happen when you get different groups working together, and because any one group will start to suffer from group think … you need that synergy of another group … you need that cross fertilization and challenge from outside. [community member – regional]

In this study, perceptions of rivalry appeared strongest at regional scale. Participants identified it as a barrier to collaboration between groups. Prospective partners competing for funds were seen as competitors and not partners, as evident from comments.

> … see a substantial percentage of collaboration …with the development commission, industry groups, local government …. at the moment competing with our budgets. [community person - regional].

At the regional scale, the allocation system of funds to regional groups places pressure on groups for delivery of innovative and strategically aligned projects to federal government. Regional groups are under pressure to be "selling" themselves and their region to the federal government. To some degree, regional groups operated by looking at other regions to get a competitive edge by copying, changing or fixing their strategies. In general, the regional groups recognised greater cross-boundary participation was necessary instead of competition.

In contrast, at the subcatchment scale individuals and groups have supported cross-boundary interactions. A cultural shift has seen landholders open their farm gates for catchment tours, allow sharing of experiences and knowledge, and providing over the

fence communication and collaboration. These activities have occurred with subcatchment groups and with other neighbouring subcatchment groups. In some subcatchments, this change has even brought farmers together to assist other landholders implement sub-catchment plans on those farms. For example, some landholders from the Wallatin Creek Wildlife and Landcare Inc. group carried out activities on an absentee landholders' property to obtain sub-catchment wide benefit.

Intra-organisational partnerships within a single agency, such as Agriculture WA, between internal programs required supportive structures and linkages to ensure integration. For example, intra-organisational partnerships would require restructuring of the Sustainable Rural Development Program to link with the industry program in Agriculture WA. Presently, these two programs are not linked, and function in isolation from one another.

Common linkages through cross membership or professional networks enabled joint projects and activities, such as scenario planning between the horticulture and South-West programs, both linked through Agriculture WA. Often these linkages were through the Program Manager and Chairpersons of these programs. Cross membership was a common element mentioned as the main form of interaction between groups, and groups rely on that cross membership for communication between them. Unfortunately, the quality of communication and formation of relations between groups was reliant on individual members, which was shown to be problematic.

> When there is cross membership to other groups, which is the main form of interaction … the two generally don't meet together as a group, or make formal presentations to each other. It is done really through common people. [government member – regional]

Natural resource management requires getting integration right. At the regional scale, there was limited integration of programs within organisations (e.g. Sustainable Rural Development and industry in Agriculture WA), and with external organisations (e.g., WRC, Development Commission).

A participatory process provides interaction with the chance to influence the other partner's internal policies while they are being formulated (Margerum & Hooper 2001). As a result, the outcome from this process is that partners are more integrated and cognizant of the issues. The key to integration is provision of a supportive structure that is participatory, and allows the open exploration of issues.

Participatory with conflict resolution mechanisms

The act of participating extends beyond a presence in the decision-making process to active involvement, interaction, and influence. The desirability of participation and the act of participating may vary where, "although many public administrators view close relationships with citizens as both necessary and desirable, most of them do not actively seek pubic involvement. If they do seek it, they do not use public input in making administrative decisions" (King et al. 1998, p. 318). This demonstrates how the existing exercise of power continues to frame the discourses of public participation, and the ways in which government departments "think". The Focus Catchment process was touted as a collaborative and participatory arrangement between landholders and government. In reality, the process had the effect of reinforcing existing relations of control, with government determining and governing over the process. The perception of most participants in the Focus Catchment process was illustrated by this following comment:

> … the lack of involvement of the farmers, and asking their advice ... lack of community participation … by the agency not fully wanting the community to be part of the process. [community member - subcatchment]

Conflict management approaches must foster on-going learning and civic dialogue within a fair political process (Lee 1993).

> … needs to be much more, much stronger participatory process. So, one of the things that would probably help would be for us, as agencies and organisations, to involve the group more. So, that we're collectively going through the exploration of these ideas, and collectively finding solutions. [scientist - subcatchment]

A critical deficiency observed by the researcher, and alluded to by community members, was the lack of trained persons with skills in environmental dispute resolution within government. Conflict, as mentioned previously, characterises decision-making where a diversity of interests from private and public must intersect to achieve good decisions. Government persons in their roles as facilitators and leaders require the competence to manage conflict, but the general perception was that there were few individuals skilled in dispute resolution.

> … dispute resolution … XX can work in this area. YY doesn't like that area and goes to go the other way from it, which I think may even be worse than XX at times. And depending on who you're dealing with, you can resolve things or you can't … whenever areas of dispute come up, ZZ's, you can almost hear him clicking over in his head. "Where are the commonalities? Where are the differences? Let's work on this together, and we'll go back and figure these things out when we sit down around the table". I don't think Ag has a high enough degree of people [to] do that, or have the ability to do that sort of thing. [community member - regional]

SUBSTANTIVE ATTRIBUTES

Increasing resources and capacity for self-reliance

Increased resources and capacity should contribute to group empowerment through improved self-reliance. Self-reliance of groups requires a period of capacity building, and a reduction in dependency on government as the sole provider. As governments

move towards new modes of operation and organising, communities are exploring ways of increasing their autonomy.

One of the fundamental benefits of partnerships is the economic advantage achieved by promoting a partnership approach to prospective funding bodies. Groups seek to advance sustainable natural resource management through community group – government agency collaborative ventures, or regional group and community on-ground projects. The federal government's Natural Heritage Trust Program values collaborative partnerships as an effective means of delivering funds and achieving results. One of the principles underpinning this program is the Commonwealth government's view that community-led partnership will build self-reliance, and State contributions can then be minimised (Gray & Lawrence 2001). From a political perspective, utilisation of partnerships promotes an image of greater resource efficiency by realising synergies between organisations.

> I think it is probably fair to say that [the] fact that we've got these partnerships have improved their successful funding applications, for example. Associations with [outside] organisations makes it look better to government in handing out dollars. [external partner - subcatchment]

Partnerships with government agencies improved the access to government resources for communities that would be otherwise unavailable, or only on a "user pays" basis. This provided community partners with the ability to effectively participate in decision-making with improved environmental literacy. Partnerships assist in enabling one of the goals of sustainable development; namely to give those less socially competent a voice in their future.

> It is quite good, really, because we can't live without agency. We need them for technical advice and support, and they need us to achieve their goals. [community member - regional]

For the State government agency Agriculture WA, partnerships and activities were undertaken with the intent of building capacity in regional groups to become financially independent, and resource themselves for future self-sufficiency. From the community's perspective, self-reliance of community-led regional groups in terms of functioning independent of government was viewed as impossible without continued government support. Through provision of funds by State government, regional groups were being directed by the State to develop strategies (e.g. regional plans) to attain self-sufficiency in the future.

> What I said to XX [regional Chairperson] is that we're not going to prop them up – said we will support them in developing a strategy for their future, - self-sufficiency … helping to work out where you're going to be in the future, and how you're going to be self sufficient … the whole basis of our relationship is so they're not dependent on us. [government member - regional]

Increasing political influence

A united collective voice increases the political influence of groups. For the groups studied, increased political influence came in the form of having their "voice heard" by decision-makers, bargaining power, gaining access to higher levels of decision-making, and having the ability to direct policy change. Many groups, from the LCD scale upwards, were aware of the importance of gaining political influence, and used partnerships to achieve that outcome. Partnerships between natural resource management groups and other external groups offered a collective force with the perception of building and achieving greater power. This was particularly evident at regional scale, and was mentioned by both community and government members.

> … develop alliances with other regional sized bodies to present a force on issues, and build strategic alliances to build political power. [government member - regional]
>
> … Chairs of regions, of regional organisations, forming informal alliances and pushing decision matters. [community member - regional]

Opportunities for collaborative learning

Sharing information was an important feature of partnerships.

> The benefits are to share knowledge or to gain more knowledge … that is the main reason we go to agencies for support - is to get their technical advice. [Also,] in other areas, to get our social structure right, our networking type of structure right. [community member - regional]

Citizen (and community) learning is influenced by the social cohesion of groups, and in this instance, it is partnerships. Social cohesion is a function of the degree to which there is trust, shared values, and a collective vision between partners (Kilpatrick & Falk 1999).

At the LCD and subcatchment scales, State government agencies disseminated information through traditional top-down approaches, without having a social learning component. However, there were situations where social learning between community and government persons eventuated at the subcatchment scale. The Focus Catchment process was connected to active learning through shared experiences on farm and subcatchment tours.

Sharing control and risk

Ideally, partnerships do not lead to diminution of either party's power. One notion of shared control in regional and subcatchment groups involves decentralised community decision-making with no forced accountability - with no written contracts, but with shared risk and responsibility. Partners form part of the group, with clearly stated objectives at the beginning, and with consistent and supportive involvement of key individuals. This attribute was viewed as important for group members, and for the partnership success. One industry person's experience in participating in a

subcatchment group's collaborative activities gave insight into the partnership arrangements.

> Consistent role and it leads to trust. Don't demand written contract or buying favour and support. [Have] clear objectives, and make them clear at the beginning. [industry member – subcatchment]

Embedded within the notion of shared control is shared responsibility and risk. The commitment of dollars is only one method of sharing the cost of partnership activities. It does not cover failure if activities are unsuccessful, and further burdens are put on communities. Ultimately, responsibility for dealing with natural resource problems resides with private landholders.

Although participants did not specifically speak of shared risk, they spoke of risk from several points. Risk was related to those associated with making decisions, wasting funds through mistakes, the political risk of publicly addressing contentious issues, risks in partnerships, and scoping future risk to groups. The actions of some groups involved helping risk takers and people with new ideas to push the boundaries of understanding.

Although the positive aspect of shared risk was not mentioned, it was evident in the development of the "zone concept" by the Blackwood Basin Group. In this situation, there was a dispersal of risk (and resources) across several partners. Adoption of this innovative approach to basin coordination and management was backed up by government agencies providing their technical expertise, interagency cooperation (Agriculture WA, CALM, DEP, WRC), strong verbal support of the concept, and the investment of government funds into the program. In spite of no explicit mention of shared risk, partnerships allowed those willing to take a risk to act. Successful partnerships are proactive (Wondolleck & Yaffee 2000), and they provide the means for risk taking to change to non-traditional approaches. A willingness to share risks is a

prerequisite for successful partnership development (Sawhill 1996). The formalisation of shared risk of partners, specifically shared responsibility for actions and outcomes in partnerships, is best through negotiated agreements such as memoranda of understanding (Selin & Chavez 1995).

At regional scales, an association between partnerships and empowerment has been previously drawn (Jennings & Moore 2000). Other literature exists where community partnerships have been identified as contributing to empowerment (Fawcett et al. 1995). The resultant organisational empowerment occurs from developing skills in networking and abilities to compete for resources. Such skills empower groups to initiate and manage change in their communities (Zimmerman 2000).

Opportunities for community leadership

Leadership by communities is vital to aid in networking with prospective partners, fostering partnerships, and maintaining communication channels between partners. Leadership from proactive community-led individuals to think beyond existing boundaries and forge partnerships was seen as lacking by external agents.

> There's certainly not strong leadership in that someone dictates what's going on. Which is a good thing. I think it's pretty democratic in that regard. There's also not sufficient leadership in the sense that there is not someone who's articulating the need to be more strategic as a group from a leadership perspective. That's probably what's lacking - for someone to say "we need to think bigger and work collaboratively." [scientist - subcatchment]

Leadership vision builds and maintains linkages with external agents/networks, and places the group in the bigger framework of natural resource planning and management. Leaders are the "face" of a group, they form key networks with external agents, and promote the group's agenda. Leadership must define and direct. Community leaders

were viewed from an external partners' perspective as having the *"need to think bigger and work collaboratively"* [external persons - subcatchment].

As mentioned in Chapter 5, government can assist communities to take a leadership role by stepping back and allowing communities to realise their roles. Results indicate recognition by government of the need for communities as partners has meant a redefining of State government agency roles when working with community groups. This downplaying by government agencies of their traditional "authority" role contributes to building communities of interest collaboratively and facing shared problems (Wondolleck & Yaffee 2000).

Desirable Attributes of Partnerships at Different Scales

As noted in the previous two chapters, there are high expectations of regional groups in terms of how their partnerships work and what they produce (Table 6.3). Eight of the nine desirable attributes considered were mentioned by members of the government-led and community-led regional groups. Only three of these eight were presented, strongly suggesting there are high - and as yet unmet - expectations regarding these partnerships.

The only desirable attributes present at all scales was valuing other partners (Table 6.3). All other desirable attributes were only present at one or two scales. One possible explanation is partnerships having different and scale-specific functions/purposes at different scales. Three desirable attributes were desired but absent, or not mentioned, at all scales. Integration with other groups may have been absent because representatives were poor at establishing social networks (see Table 4.4). Participatory processes emphasising conflict resolution were either desired but absent, or not mentioned. Some

form of conflict management appears essential to maintaining partnerships and producing substantive outcomes.

Conflict resolution within partnerships has received little attention. Poncelet (2001) notes the perception that partnerships are fundamentally non-conflictual.

> The cultural model held by individuals conceptualizes partnerships in contrast to conflictual relations … this supposition is the belief that confrontation and oppositional behaviours are ultimately an anathema to collaboration. (Poncelet 2001, p. 19)

Such perception helps explain why conflict resolution was not mentioned. Another reason for the limited attention to conflict resolution may be due to the range of characteristics identified as outcomes of collaborations that may assist in minimising the potential for conflict (e.g. effective characteristics identified by Selin et al. (2000)). For example, these include: a credible process with a facilitator and good communication; mutual respect and trust; identifying common interests; use of reliable data; existence of formal organisational structure; ensuring all affected stakeholders involved are in balanced power; and a willingness to compromise and negotiate (Selin et al. 2000; Wondolleck & Yaffee 1994).

Collaborative learning is the third attribute in this category. This result suggests processes of decision-making and partner interactions were not providing forums for social learning, or it was not even being considered. Interestingly, all three of these desirable attributes relate to communication and cohesiveness between partners.

Table 6.3 Occurrence of Desirable Partnership Attributes at the Different Scales.

Partnership Attribute	State	Regional		LCD	Sub catchment
		Government -led	Community -led		
PROCESS ATTRIBUTES					
Valuing other partners					
Building trust and commitment for shared understanding					
Integration through supportive structures and networks with other groups					
Participatory with conflict resolution					
SUBSTANTIVE ATTRIBUTES					
Increasing resources and capacity for self-reliance					
Increasing political influence					
Opportunities for collaborative learning					
Sharing control for a fair distribution of power in decision-making					
Opportunities for community leadership					

Light shade - attribute desired and present

Black shade – attribute desired and absent

Gray shade - attribute not mentioned

State

The State scale partnership met over half the desirable attributes that respondents identified as important (Table 6.3). Several attributes not mentioned by State group members were identified at other scales, while integrating with other groups and sharing control were desired but absent. As with individual leadership (Chapter 5.), there were fewer expectations in relation to state-scale partnerships. Reasons included a recognition of the partnership delivering greater political power, and its statutory basis.

> XX [community member] is not happy. The Soil and Land Conservation Council is being abolished, as he sees it, as [sic] a loss between community and government. There will be no partnership like this in the future at this State level. [government person – State]

The absence and lack of mention for collaborative learning opportunities has implications for better decision-making, the building of social capital (Kilpatrick et al. 1998), and support of social sustainability. The group's meeting structure and interactions between individuals may be impeding collaborative learning. The quality of the social processes, and relationships within which learning interactions take place, is seen by Kilpatrick et al. (1998) as having an affect on informal and formal learning. This may suggest greater attention to the social processes and relationship building between partner organisations, and individuals participating in partnerships.

Respondents made mention of competition and turf wars acting as barriers, precluding integration with other groups. The lack of comment about participatory processes for fair and collaborative action was conspicuously absent given the interorganisation rivalry amongst State government agencies. A related attribute that was desired, but absent, was shared control between partners. A misguided assumption about statutory groups is that they will automatically participate fairly and seek equitable arrangements for decision-making.

> Yes [not integrated]. It is always [the] "protection of the patch" thing [that] seems to come through very strongly. And that is our patch, and you keep off it, rather than "look if we don't get in there together and fix this with the community, we are just going to lose all that biodiversity". [community member – State]

Another possible explanation is that respondents may not have viewed their participation and involvement in partnerships as a way to learn from others, hence they see no need for learning processes, or may not have realised they were learning. Rather, the State group sought partnerships as a vehicle to advance group objectives, and to develop synergistic working relationships through shared understanding.

> The Soil and Land Conservation Council has a close working relationship with Agriculture WA, and therefore they are influential. [government person – State]

Regional

Partnership at regional scale appears to be similar to findings for representation and leadership in demanding a large number of attributes. This was the only scale where shared control for equitable power in decision-making was desired and present. This highlights the "more developed" partnership arrangements in regional groups. Results suggest that these regional partnerships are based on, a sharing of power, or at least a perception of sharing. Process-oriented shortcomings at regional scale included the lack of efforts to build trust, and lack of integration.

> … cooperation by both programs, understanding of Sustainable Rural Development has to develop. What does Sustainable Rural Development do? - and develop a shared language. [community member - regional]
>
> There [are] some problem issues within the sustainable rural development and the industry groups … it is probably the area of partnership … they [industry groups] have got to stop seeing themselves as mutually exclusive. [community member – regional]

In terms of substantive attributes, the regional groups wanted, but did not feel they had, increased political influence through their partnerships. This result may suggests

partners are tied to meeting regional outcomes and don't create the necessary linkages to higher decision-making structures. The results also reflect uncertainty regarding a rapidly changing political landscape, with the advent of the National Landcare Program and Natural Heritage Trust, and now Natural Heritage Trust II and the National Action Plan. Regional groups are not sure who to influence, and what their potential sphere of action should be. Problems with integration related to the difficulties the government-led groups experienced when attempting to integrate Sustainable Rural Development with industry programs in Agriculture WA and other State government agencies. For community-led groups, there was a lack of integration across regions, with poor networks between regional groups.

> … need for more integration between industry and sustainable rural development programs … Collaboration on ground between the two projects. All recognise the need for it, but is it occurring? Cooperation and integration with industry programs – is starting to occur … get Sustainable Rural Development into industry programs … need to do more of promoting outside meetings. Build new business. [community member – regional]

Overall, there were only minor differences between the government-led and community-led regional groups in the desirable attributes present and identified as important. Most of the process-oriented attributes were similar between the two types of regional groups, except that the government-led groups sought partnership processes that were participatory and involved conflict resolution, and community-led group members did not. While community-led groups wear a mantle of participatory democracy, they do not flag participation and credibility as desirable attributes of their partnerships. Given that these groups noted the presence of power-sharing, this lack of mention of participation may have been an oversight rather than neglect. Or, if those "with power" are present and this power is shared, broader notions of participation may be irrelevant.

Deficiency in providing for collaborative learning was probably an artefact of partnership process features not being met, such as those related to involvement in public deliberation. For instance, Daniels and Walker (1996) suggest collaborative learning may rely on a fundamental element, that of participants having a rich and meaningful voice in the process through stakeholder representation. The absence of a participatory process may impede collaborative learning. It may also be that respondents did not view what was occurring as collaborative learning, but rather an exchange and sharing of information, resource building, and gaining greater capacity to implement solutions. The importance of collaborative learning is highlighted by Tonn et al. (2000, p. 171) because it is "an essential decision-making mode for sustainable societies, since it is a preferable means for evolving and improving our collective understanding of complex environmental decisions".

Learning has two components: the process and the outcomes (Kilpatrick et al. 1998). It may be possible that while participants receive information, they may not identify how the learning process has made successful changes. Therefore, group members may be passively learning by developing shared meanings, forming new understandings together, and being transformed through the process. On observation of group meetings involving partners, an array of activities were occurring which were characteristic of collaborative learning, including: constructive communication and progressing of shared ideas; a mutual understanding of one another's views; discussions allowing the open exchange of ideas; decision-making being jointly undertaken; meetings moving understanding forward on issues; and the generation of options.

LCD

In comparison to other scales, there were lesser expectations of partnerships at the LCD scale (Table 6.3). A possible reason was the lack of evidence of the benefits or need for partnerships at this scale. Other possible reasons accounting for absent attributes were leadership issues at LCD scale (see Chapter 5), the lack of resources to foster and maintain partnerships, and the absence of conflict resolution mechanisms and mediation skills in individuals.

The single substantive attribute identified as desired and present was greater political influence. This feature was shared only with the Soil and Land Conservation Council, and seems to reflect the statutory basis of the group, with clear links to the Minister for Agriculture in the case of the Council and the Commissioner for Soil Conservation for LCDCs. Members valued partners, but no other process attributes were present or mentioned.

> Financial as well as supportive [partnership with local government]. Very good partnership we have. [community member – LCD]

There was an absence of trust and commitment for fostering shared understanding, together with poor participation and conflict management, at this scale. Also desired were conflict resolution contributions to group processes. Members highlighted the absence of a government agency person with conflict resolution skills to deal with the conflict between some community members and government agency persons. Many participants at this scale found informal learning environments and locations more conducive, such as learning through demonstrations and small group discussions. During the interviews, a number of respondents mentioned difficulties experienced in participating in public meetings and having the confidence to speak.

Subcatchment

Similarly to regional scale partnerships, respondents had high expectations of subcatchment partnerships (Table 6.3). Desirable attributes that were present included valuing other partners, shared understanding through the building of trust and commitment from social interactions, increased resourcing and capacity, and community leadership opportunities. The trust and commitment were founded on the mutual exchange of information between partners, and gradually developed as the partnership matured. Increased resourcing during stages of the collaboration did occur, along with improved human capacity in the form of individuals' capacity, which developed through greater confidence to participate and acquire knowledge. New collaborations were being pursued due to the success of previous joint ventures, which was a way of continuing the group's activities.

> Groups showing interest even - in latter times. The Department of Conservation and Land Management have actually shown some interest to come and work with the group with direct seeding. So has Greening WA. So, we are starting to see more groups prepared to come. [community member – subcatchment]

The absence of other partnership attributes may be attributed to leadership issues experienced by sub-catchment groups (as mentioned in Chapter 5), the roles of representatives and the group (Chapter 4), and problems with the decision-making processes used by government partners (e.g. Focus Catchment process, nature conservation planning). A possible barrier to collaborative activities in Landcare groups pertains to landholders from leased farms, in particular the lack of interest by the leasee and leasor to invest in long-term but mutually beneficial land management.

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CHAPTER 7.

CONCLUSIONS AND THE FUTURE

7.1 Conclusions

To re-cap on the purpose of this study and provide a clear focus for this conclusion, the guiding research question was: *How well do current forms of organising for making natural resource management decisions at a range of spatial scales in agricultural south-western Australia perform in terms of social sustainability?* The associated research objectives directing this study were to:

1) Define and describe the relationships between social sustainability, participation in decision-making as a central tenet, and representation, leadership and partnerships as key features of participation.

2) Categorise and analyse the characteristics of representation, leadership and partnerships at four spatial scales, from State to subcatchment.

3) Evaluate, using respondents' criteria and comments, how well representation, leadership and partnerships performed at each of these spatial scales.

4) Determine, drawing on this evaluation, the strengths and weaknesses of decision-making, as a central tenet of social sustainability, at different spatial scales.

5) Review, based on this study's findings and previous research, the features of such decision-making that support social sustainability.

The following conclusions are structured around addressing and reviewing these above objectives. The chapter closes with some thoughts for the future, in terms of progressing social sustainability in natural resource management in Australian agricultural settings.

1) Define and describe the relationships between social sustainability, participation in decision-making as a central tenet, and representation, leadership and partnerships as key features of participation.

The introductory chapter of this thesis used previous research and practice to establish, define and then describe these relationships. Social sustainability is recognized as one of the key components of sustainability, along with economic and ecological considerations (Elkington 1997). As described in chapter 1, social sustainability depends on power-sharing, equity, fairness and empowerment through participation. It also depends on maintenance of desired social values, institutions, traditions, cultures and other social characteristics (Barbier 1987). Although social sustainability has been conceptualized from numerous perspectives, this thesis provides one of the first efforts at examining social sustainability in the context of organising for natural resource management decision-making. Such decision-making is influenced by and in turn influences social capital, capacity-building and empowerment (see Figure 1 in chapter 1).

The key feature of social sustainability in relation to natural resource management decision-making explored in this study was participation. Participation has been flagged by numerous policy makers and authors, including receiving detailed attention in Agenda 21 (UNCED 1992) as central to sustainability. Elements of participation examined in detail in this thesis were representation (chapter 4), leadership (chapter 5) and partnerships (chapter 6). Together, these three aspects help focus attention on better understanding and achieving participation that contributes to social sustainability. Also, together they enable comment on the extent to which current participatory approaches to

natural resource management decision-making meet expectations regarding democratic processes and outcomes.

2) Categorise and analyse the characteristics of representation, leadership and partnerships at four spatial scales, from State to subcatchment.

To keep this conclusion tightly focused, my comments are restricted to discussing individual representation, leadership and partnerships, with details on group findings available in the respective chapters but not reviewed here. For each aspect of participation, analysis focused firstly on fully describing the elements (e.g. representation) before moving into a review of desirable attributes and analysis of whether these attributes were present or not (covered in the next point). The description and associated analysis were done at each of the four scales; brief comparisons are presented in the next point.

Representation had two general but overlapping forms based on whether a respondent's role as a representative was largely prescribed for them (see section 4.3 Types of representation, Table 4.1) or whether they had constructed their role (i.e. role-making) as decision-making unfolded (see section 4.4 Roles of representatives, Table 4.2). The types of representation were very much influenced by why and how members came to be part of their group, with types such as sectoral and self-interest representation being present at most of the scales studied. Roles that became apparent through role-making included being a leader, negotiator and information conduit.

Leadership types reflected both the opportunities given to and created by group members, with single dominant and delegated leadership occurring at more scales than the other types (Table 5.1). Three partnerships types were evident – State government-

community, local government-community and research organization-community – with the first occurring at all four scales, and the second and third each at only one scale (Table 6.1).

3) Evaluate, using respondents' criteria and comments, how well representation, leadership and partnerships performed at each of these spatial scales.

How well each aspect of participation performed was evaluated using desirable attributes that emerged from the interviews. These desirable attributes were the expectations of performance at each scale. The four spatial scales examined were State, regional (divided into community-led and government-led), LCD and subcatchment groups. Details on the groups are summarized in Tables 4.1 and 4.2. The results allow comment on how well expectations (i.e. the desirable criteria) were met. In turn, these criteria provide the means for assessing social sustainability.

For representation, several of the desirable attributes were already captured in the roles currently offered – for example, being a member because of personal competencies - or through roles made. For example, making a role as an information conduit meets the desired attribute of facilitating two-way communication. A number of other desired attributes, however, were not part of current role taking or making (see Table 4.3).

The expectations regarding representation and the extent to which these expectations were met varied greatly between scales. There were higher expectations of the State group and the government-led regional groups, and they were mostly met. Although there were similarly high expectations of the community-led regional groups, those expectations were not met. At the two smaller scales, there were much fewer expectations in terms of roles. Attributes that were noted as desired, however, such as

being an active participant and adopting a group identity, were not present. Collectively these findings suggest that there are high and probably unachievable expectations of representation in relation to these natural resource management groups. For the two more "successful" scales, their success may be attributable in part to having a narrow selection process and associated narrower set of clearly prescribed roles (see Tables 3.2 and 4.1). Also, the expertise and competency basis of representation at these two scales, plus the use of facilitators to assist in developing members' skills, would have helped members identify and contribute to their representation tasks.

Active participation, acting credibly, adopting a group identity and commitment were all regarded as desirable at almost all scales. These attributes provide a core descriptive set for the attributes of representation, as they are desired by members of groups at all scales.

For leadership, as for representation, there were high expectations regarding leadership at the regional scale, including being able to facilitate processes and interactions and having different leadership for different issues (see Table 5.4). For the community-led regional groups, almost half of these expectations were not met. Similarly for subcatchments, around half of the desirable attributes were identified as absent. The regional government-led groups fared marginally better in terms of a greater number of desirable attributes being met.

Regional (government and community-led) and subcatchment groups are being expected to help communities address natural resource management issues, and obtain funding from governments and elsewhere to do so. These expectations help explain the raft of desired leadership attributes. Another reason for the difference between -

regional and subcatchment groups, and the other spatial scales is the former, being non-legislative (de facto) - possess greater flexibility and discretion, and fewer constraints to how they organise. This flexibility allows groups to draw on different types of leadership as needed. Such flexibility and discretion potentially make these scales attractive in providing a setting where adaptive management is possible and hence sustainability can become a possibility.

Part of the issue with leadership at subcatchment scales relates to their designated roles as Focus Catchments. There was very much the perception that leadership was not provided and not enhanced by the Focus Catchment process. Rather than the "leading" State government agencies being regarded as providing leadership or helping build leadership, they were instead regarded as having a service role. Uncertainty associated with these new processes probably coloured respondents' views regarding leadership at this scale. Additionally, prior to initiation of the Focus Catchment process, these catchment groups were self-organising, probably with fairly clear notions of leadership. The Focus Catchment process has potentially created "leadership uncertainty" while at the same time raising members' expectations regarding leadership.

For the State group, leadership was narrowly defined and accepted as being described by one attribute – different leadership being possible for different issues – and identified as present. There seems to be a more realistic/pragmatic acceptance of the scope of the task, in part due to the length of time the group has been operating. For the LCDCs, leadership seems a vexed issue, with no leadership attribute being acknowledged as present and several attributes desired but noted as absent (Table 5.4). These responses seem to suggest respondents view this scale of decision-making as becoming

increasingly redundant, encroached upon first by subcatchment groups and most recently by regional groups.

Unlike the clear, descriptive, core set of attributes regarded as desirable at all scales for representation, for leadership the following desirable attributes were detailed for only three of the four scales – leadership facilitates processes and interactions, leadership succession, different leadership possible for different issues and external guidance available. Together these provide a core set of descriptors for the attributes of leadership, as desired by members of groups and independent of scale.

In terms of partnerships, the focus of chapter 6, many of my findings align closely with those from previous studies (Alden & Schroeder 1998; Selin & Chavez 1994; Selin et al. 2000; Waddock & Bannister 1991)[1], and the substantive achievements of partnership touted, including better agency coordination, enhanced resource sharing, better communication, and enhanced levels of trust (Selin et al. 2000; Yaffee et al. 1996; Wondolleck & Yaffee 1994). These outcomes can contribute to greater efficiency in organising for sustainable natural resource management. Furthermore, the desirable attributes identified contribute to this body of literature and point towards the need to support social sustainability through strong partnerships.

Similarly to the findings for representation and leadership, the greatest expectations of partnerships were held in relation to regional scale organising; both government and community-led (see Table 6.3). For both types of groups at this scale, less than half of the desired attributes were noted as present. Those present for both included valuing

1 These include identifying the need for: a committed leadership from a core group, trust between partners and accountability, focus on deliverable products beneficial to partners, shared responsibility, partner representatives holding authority to make decisions for their organisation, balance of power between partners, and clear defined roles and objectives.

other partners, and most importantly for the focus of this thesis on democracy and decision-making, sharing control for a fair distribution of power in decision-making. Also as with representation and leadership, there were narrower expectations at State scale and they were met. More was expected at the subcatchment scale, but similarly to the regional scale, around half of the desirable attributes were absent. Little was expected of the LCDCs, although around half of the desired attributes were noted as present. These differences reflect the various expectations of performance at each scale.

Given that many of the partnerships in this study included government; their presence or absence, and degree of involvement at various scales must have a strong bearing on the efficacy of partnering arrangements. It is important when comparing the different scales to take into account these critical variations. The State government, a strong, persistent player in natural resource management in Western Australia, has invested heavily in partnership arrangements with communities at the State and regional scales, with a much lesser involvement at LCD levels. Its role in subcatchments has recently accelerated explaining the similar result for subcatchments and regional scales. Again, the State level is very different and narrowly focused, and as explained earlier, perhaps because of the length of time the group has been in operation and its clear government-based mandate.

Partnerships at all scales were poor in providing collaborative learning opportunities and integrating with other groups (see Table 6.3). Both were identified as desirable but absent attributes. Trust and commitment are important contributors to collaborative learning. Learning can be “enhanced through a participatory framework inclusive of stakeholder interests” (Meppem & Gill 1998, p. 121). Learning, as a central tenet of

participation, builds the capacity of communities to solve natural resource management problems.

Integration and coordination across organisations for greater effectiveness are driving forces for collaboration, and can benefit communities and government through better inter-agency cooperation and joint fact finding. Greater effectiveness through collaborative activities is aimed at achieving environmental objectives, access and utilisation of limited resources and funding, and input and influence in policy-making for natural resource management. Partnership is the vehicle supporting cooperation and learning between different organisations, and providing opportunities for natural resource management problems to be ameliorated. Conversely, social learning facilitates collaboration, "by creating new relationships, building upon cooperative relationships, and transforming adversarial ones" (Schusler et al. 2003, p. 312). Groups are currently more adept at showing leadership through actions of self-determination rather than using partnerships as a platform for leadership.

Reasons for this shortfall in partnerships may be due to a focus on funders resulting in "grant-led" competition at the expense of forming partnerships, and strengthening horizontal and vertical linkages with other groups. Another possible reason is that some scales (e.g., LCD and subcatchment) may not be suitable platforms for partnerships because there are no apparent benefits to be gained from collaboration. This is especially the case where State government agencies have shifted over the last decade to a minimalist participation, short-term approach to service delivery. Motivation, therefore, on both community and government sides to build partnerships at the LCDC and subcatchment level is lacking.

Two attributes that were identified at all four scales provide the core set of descriptors for the attributes of partnerships – valuing other partners, and building trust and commitment. Trust and commitment have been identified as essential for leadership development, which in turn enhances the human resources and social capital in groups (Day 2000).

One of the most interesting findings from the partnership analyses was that conflict resolution was not identified as desirable, except by the government-led regional and subcatchment groups (Table 6.3). A general lack of skilled negotiators may explain this lack of awareness. The government-led regional groups and subcatchment groups are the only ones who have experienced facilitation. The concern here is participatory processes and conflict resolution are the basic components of empowerment.

4) Determine, drawing on this evaluation, the key features of decision-making, as a central tenet of social sustainability, at different spatial scales.

Questions continue to be asked regarding the "best" spatial scale for addressing natural resource management issues (e.g., Jennings & Moore 2000). Writers such as Griffith et al. (1999, p. 674) suggest that "a variety of spatial frameworks at different scales might be needed to help integrate landscape data … and expert knowledge". In this study, each scale had key features explored in the preceding chapters and briefly reviewed below.

In summary, the State scale is narrowly focused and meets respondents' expectations, but its limited scope may not enhance social sustainability. Regional groups have great things expected of them, with about half of these being met. State and regional groups expect an array of representation types. This expectation is poorly met by the community-led regional groups, and may reflect the different contexts and functioning

by groups at regional and State scale. Little is expected or gained from LCDs while subcatchment groups seem to trigger similar expectations to the regional groups for leadership and partnership.

At State scale, all desirable attributes, where these attributes are taken as reflecting respondents' notions of sustainability ideals, were present. Respondents were satisfied with decision-making at this scale, however, their expectations were limited especially in relation to leadership (Table 5.4). The broader suite of attributes garnered from all scales suggests that there are broader sustainability concerns that are not currently considered at the State scale. For example, collaborative learning seems an essential feature of sustainability but was not mentioned in relation to State-level partnerships. This result illustrates the variation in expectations of performance at the different scales.

At this scale, current environmental decision-making supports social sustainability through representation that involves credibility and fairness, identifying with the group, commitment, social networking, and functioning in multiple roles. Importantly also, this scale supports efficient and democratic representation by groups through the involvement of individuals that hold the appropriate level of authority, competency, and attention to social justice principles (e.g. accountability to constituents and autonomy). While institutional arrangements, administrative structures and pending dissolution of the group prevent a proactive leadership approach, there is strong leadership capacity. Partnerships restricted to State government partners, and an inflexible and problematic statutory operating environment, are two of the problems at this scale. Insufficient attention to integrating arrangements, conflict resolution, and sharing power with partners, limit the State scale's contribution to social sustainability. The few process

attributes supported by the State group highlight the presence of good social relations between partners.

At regional scale, current decision-making by both the government–led and community-led groups supports social sustainability through various features of participation. This was through respondents acting credibly, having leaders that facilitated decision processes and social interactions, and was open to external leadership. Democratic processes were upheld through shared control and fairness by partners in decision-making.

Generally, the regional scale sought the largest suite of desirable attributes, but the expectations of members were beyond the feasibility of current institutional arrangements. The representation attributes identified reflect ideals of sustainability, however, there is mixed success in delivery between the government- and community-led groups (Table 4.4 and Table 4.7). Of concern is the lack of two-way communication between representatives and constituents, and no establishment of social networks, which is no doubt associated with the lack of capacity to carry out these activities. Obviously connected with the absence of external group linkages, this missing attribute hinders coordination between other groups and scales. A particularly important attribute for any representative group, but missing at regional scale, is a credible and legitimate group image. To varying degrees there appears to be a crisis in representation occurring within the community-led groups in how they meet social justice concerns, represent all interests and attract the right representatives. In terms of regional partnerships, they are failing to build trust and commitment, provide an environment for shared learning and integration of networks, which has implications for empowerment and social sustainability. In terms of improving social learning, Schusler et al. (2003) provide

direction on process characteristics that enable social learning among participants for co-management.

Previous, related work (Jennings & Moore 2000) has drawn our attention to a number of assumptions around why “regional delivery” of natural resource management is currently highly regarded in Australia. Assumptions include the advantage regional organising links, top-down government planning and bottom-up community activity. This organising empowers the community through regionally-based government-community partnerships, provides for fair representation of all interests, are more democratic, and assists in overcoming conflict. This research has shown there are high expectations in terms of the ability to contribute to social sustainability as evidenced by the numerous desired attributes at regional scale for representation, leadership and partnerships.

The number of desirable attributes was very similar for community-led versus government-led regional groups for both leadership (more than half of desired attributes present) and partnerships (about a third of the desired attributes were present). There were more attributes listed as desired at this scale than any other. Having this breadth of desirable attributes, which reflect social sustainability requirements, suggests that this scale was recognized by respondents, at least implicitly, as offering social sustainability possibilities. Whether all these attributes can be satisfied at one scale is an as yet un-answered question.

Representation was the only real difference between the two types of regional group, with government-led groups showing far more expectations met than the community-led groups (Table 4.4). The array of expectations of government-led regional groups was

high, and most of these were met, in contrast to the community-led groups where a similar level of expectations was not met.

Comparing the community-led and government-led regional groups provides the opportunity to compare the processes and outcomes of regionalism (the former) and regionalisation (the latter) and relate them to social sustainability. There were few differences between the two forms, the only clear difference being, as covered earlier, that more of the raft of desirable attributes associated with representation were met through regionalisation than regionalism. Perhaps the involvement and organisation by government assisted in clarifying and consolidating roles. Otherwise, they were very similar and both were accompanied, as mentioned on numerous occasions, by a many desired, but as yet unmet criteria associated with social sustainability.

At the LCD scale, expectations were limited and they were generally not met, except for several attributes of partnerships (Table 6.3). This result suggests that respondents did not expect this scale to contribute to social sustainability, and that it generally did not contribute. Part of this result can be attributed to having a statutory basis, which results in a narrow membership, a limited role for State government, and a prescribed management role. Also, natural resource management activities in agricultural areas over the last decade or so have relied on subcatchments and more recently regional groups, and not LCDCs, as the sources of funding proposals, facilitators and implementers of on-ground outcomes.

Those attributes contributing to social sustainability at this scale were focused at the group level, not the individual. LCDCs seek to uphold democratic notions – being representative, supporting social justice, and upholding credibility and legitimacy in the

community. Unlike the State group's pending dissolution, a slow decay of LCDCs appears to be a result of their redundancy at this scale. Problems with leadership and partnerships are symptoms of their decline.

One major weakness of the LCD scale was leadership renewal issues, and the lack of attention given to leadership development and training. Another concern was enhancing the groups' limited leadership potential by building strong linkages with external organisations, such as research organisations and non-government organisations. Greater activism on the part of groups to form partnerships would have positive implications for self-determination and the empowerment of members. In terms of sustaining such partnership, participatory processes with conflict resolution measures was needed.

While the subcatchment scale excels in both accommodating a flexible range of leaders and supporting participatory democracy, it occurs at the expense of neglecting external group linkages and social networks. This has possibly contributed to leadership issues, which has translated into process and substantive deficiencies in partnership arrangements. Interestingly, the presence of participatory democracy at this scale does not ensure the social conditions for partnership, such as integrating structures, or outcomes of collaborative learning and shared decision-making power.

An examination of the desired attributes at the subcatchment provides some insights. Little was expected and gained in terms of representation at this scale (Table 4.4). This profile was similar for all the smaller spatial scales (community-led regional, LCDC and subcatchment groups). The expectations were high and generally unmet for leadership, and contrasted with similarly high expectations for partnerships but more being met

(Tables 5.4 & 6.3). Organising at this spatial scale seems to have neglected or undervalued the role of leadership for sustainable natural resource management.

Groups at different scales were in differing positions to meet the needs and demands placed on them. In this study, groups have been judged on how they perform based on their own criteria of success. At the lower scales, groups may be excused for not having the capacity to make change happen as they craft a path to a more sustainable future. This failure may be due to the characteristics of the group (e.g. leadership), and to their roles and capabilities. The lack success in organising for sustainable natural resource management at LCD scale may also be attributed to the absence of skilled bureaucrats who have training and experience beyond the level of community participants. This suggests that LCDs, as they exist currently, are set up to fail. A re-think of the objectives, functioning and composition which takes into account the challenges of this scale is long overdue.

5) Review, based on previous research and this study's findings, the features of such decision-making that support social sustainability.

The conceptual framework of social sustainability presented in Chapter 1 provided a simplified version of the overall complexity of participation and decision-making which is needed to achieve social sustainability. The research undertaken has contributed further understanding to this area by identifying the characteristics ('procedural precursors') of participation and social decision-making that enhance the potential of groups to achieve social sustainability, where decisions made for sustainability are implemented and maintained. Many of these 'procedural precursors' are also the practical elements leading to empowerment, capacity building and social capital. The linkages between the different concepts within the framework have been strengthened

as a result of the research. The framework can now be used to build a better understanding among the multiple stakeholders regarding the way forward in organising for sustainable outcomes.

A fundamental interest initiated in chapter 1, and threading its way through this thesis, has been the democratic opportunities offered by groups at each scale. I have assumed that democracy (and more tightly refined versions as discussed below) is essential for social sustainability. Chapter 1 also teased out the differences between representative and participatory democracy. These notions are here tied back to the groups and comments made in relation to social sustainability.

Only at the subcatchment scale is participatory democracy truly possible – all those directly affected by decision-making take part in it. At larger scales, from LCD upwards, the logistics of the number of people involved mean that representative democracy is most likely. Whether the groups at these scales are truly representative is a contested point. In most instances, members are either self-selected or nominated by ministers. For most groups they are not truly representative. However, the Blackwood Basin Group comes closest to a representative democracy ideal (Table 3.2).

The literature on social sustainability (Wild & Marshall 1999; Moote et al. 1997; Steeland & Asher 1997) argues that participatory democracy is preferable to representative democracy. My results suggest the opposite; that in terms of meeting desired criteria, regional (representative) groups are ahead of subcatchments (participatory) groups in the number of desired criteria that are met. Hence this scale is preferable in terms of social sustainability. This result can be explained in part by the strong history in Western Australia of regional groups being self-selected or

Ministerially-appointed, and therefore the community is familiar with this and the associated representation and leadership roles. Similarly, natural resource management has a long history of government involvement and hence the expression of criteria that value partnerships with government as an important feature of social sustainability.

Returning to ideas around representative democracy, in reality this is not a suitable means for describing the activities of these natural resource management groups. There are a number of reasons why they are not representative. First, they do not represent all groups in their constituent communities. As mentioned in chapter 1, for example, Indigenous interests are not included. This can be further attributed to participation processes failing to cater to the cultural and social needs of such groups (Hampton 1999). Second, members tend to be opinion leaders and those with existing influence, so those who are less influential or might represent them are not included. This equates with Lane's (1986) notion of membership based on the "justice of earned desserts". Third, there was often poor communication between "representatives" and their constituents. Last, accountability mechanisms downward and back to communities are still being developed. Given that accountability is a central tenet of democracy in any form (Ife 1995), this is a current shortcoming at all scales from LCD upwards.

The challenge for these groups is to move further towards democratic ideals, whether they are achieved through participatory or more likely representative processes. A main point of focus must be how members are selected. For such a process to be democratic, these members must be elected to represent others. Such a process must be balanced against increasing interest on members' competency. Democracy also depends on having accountability to those outside each group, and having the means for communities to respond and influence group activities if they are not happy with how

groups are acting. Representation that supports social sustainability aspires to improve the credibility and legitimacy status afforded to representatives, representative groups, and their negotiated outcomes.

In terms of democratic ideals, power-sharing is a central concern in pluralistic decision-making environments (Ife 1995). Such sharing is a feature of the regional groups and was identified as desired and present at this scale, by both government- and community-led groups. Therefore, although notions of representative democracy and other associated ideals were not met, there was the perception that this central feature of democracy was present at this scale. Future actions will benefit from innovation in this area, through processes that "produce technically competent and socially acceptable management plans … [and] continue to explore innovative democratic approaches" (Webler & Tuler 1999, p. 541).

While the competence-based mode of representation evident at larger scales of natural resource decision-making does not pretend to engage in consultative and communicative exchange between representatives and communities, it has other drawbacks. The danger with representation drawing on "competent" individuals is its prescription for "elite" membership, and the undermining of the "volunteerism" ethos that is the foundation of most natural resource management groups. Competency of representatives as a criterion for representation, will however, continue to have a presence at larger scales and assist in improving decision-making.

There have been numerous reports in the literature of elitism from government through a "top-down" approach, but less about "bottom-up" elitism by community leaders. The assumption has been that elitism is a manifestation of a government approach, and a

community approach is not prone to these same problems. Regardless of its origins, elitism has negative consequences for social capital (Gray & Lawrence 2001). This erosion of social capital, as noted by Gray and Lawrence (2001), prevents such characteristics as: widespread participation in community decision-making, cooperative and trust social relationships, and the acceptance of minority groups as participants.

7.2 Limits of the Research Study

Reflecting on the study undertaken, there were several limitations, most of which were beyond the control of the researcher. Firstly, the use of only one State case due to the absence of other suitable groups prevented literal replication. The building of robust explanations through empirical observation at State scale was limited, and comparison within scale was not possible. Secondly, no Indigenous Australians were participants in the study because they were not members of any of the groups studied. This shortcoming reflects the failure of current natural resource membership to be inclusive of all participants who may influence, or are affected by natural resource management decision-making. The narrow focus of land ownership and rights in Australia, combined with the problematic nature of defining community and community members, has given legitimacy for participation to some people but not all. Finally, this study has examined three factors of participation and approached social sustainability within those set of guidelines. If a different approach had been used, with other factors examined, there may have been alternate outcomes.

7.3 Future Research

Future research to build on the current study would be well placed if it was focused on two areas. Firstly, the application of the conceptual model is needed in other settings to validate the study's findings and further develop this social sustainability framework.

This current study was undertaken in the agricultural landscape of Australia. By looking beyond this setting to other resource sectors and countries, there would be opportunity to add legitimacy to these findings. Further research may link the current study to an assessment of different processes at each of the four spatial scales to evaluate if: (1) Is one process performing better than others across the four scales? (2) Are processes at one scale doing better than processes at another scale? and (3) Do these processes succeed in achieving the desired outcomes? This last posed question seeks to determine if social sustainability is actually achieved through processes having certain characteristics. It assesses the *ends* and not just the *means*.

Secondly, future research should further examine the precursors to social sustainability to understand how the presence or absence of specific factors advance or hinder the achievement of social sustainability. In particular, expanding the focus from participation to include capacity building, empowerment and social capital to determine what factors are important and what they specifically contribute to the achievement of social sustainability is desirable. As previously stated in Chapter 1, it is timely to be giving attention to the social aspect of managing sustainability when in the past studies have sought to understand only the requirements for ecological sustainability.

To conclude, this thesis has answered the question – How well do current forms of organising for making natural resource management decisions at a range of spatial scales in agricultural south-western Australia perform in terms of sustainability? Some scales are performing better than others: the LCDs, caught between the regions and subcatchments, seem to be faring the poorest. The State scale is performing well, in terms of its mandate, with its lower expectations than those ascribed to regional and subcatchment scales clearly being met. On the other hand, the expectations of

community- and government-led regional groups and subcatchment groups are enormous. The only place where there was any major difference between the three was in representation: it was barely considered by respondents from the subcatchment groups, and for the regional groups less of the expectations were met by the community-led than government-led groups. Otherwise they were very similar. All are meeting some expectations and not others. In terms of social sustainability, the challenge remains to balance these expectations with what is achievable.

A large part of the challenge now remains to learn from the successes of the State group, many of these may be attributable to the time the group has been working together, and to manage the raft of expectations being placed on regional and subcatchment groups. There are also some clear lessons from representation and the government-led regional groups that could be transferred to other scales.

APPENDIX ONE.

Interview List

State

Soil and Land Conservation Council

Rex Edmondson
Garry English
Rachel Siewert
Andrew Watson
Keith Bradby – AgWA Policy Officer

Regional Scale

South-West Regional Partnership Group

Tom Busher
Andy Gulliver
Colin Bosustow
Theo Nabben
Ross George
Roseanne Sharpe
Ann Lyster

Central Agricultural Regional Partnership Group

Paul Hansen
Mike McFarlane
Peter McLeod
Ben Davey

Blackwood Basin Group

Bruce Bone
David Chadwick
Owen Dare
Susan Masterson
Russel Thomson
David Reid
Saan Ecker
Nick Dodson
Jon Glauert
Luke Pen

Avon Working Group

Andrew Huffer
Linda Leonard
Robert Boase
John Dunne
Ken Wallace
Mike McFarlane
Doug Morgan
Kennedy Miller
Barbara Morrell
Peter McLeod

LCD Scale

Dumbleyung LCDC

Sandy Tyler
Terri Lloyd
Jan Gray
Michelle Brown
Owen Dare
Gordon Davidson
Rod Wright

Goomalling LCDC

Clem Kerp
Margaret Davey
Tim Powell
Geoff White
John Silver
Ben Davey

Subcatchment Scale

Fence Road Catchment

Claudia Hadlow
Gordon Davidson
Ryan Minchim
Jan Gray
Peter Mullens
Ted Astbury
Rod Taylor
Bruce Ward

Gabby Quoi Quoi Catchment

Ken Siegert
Malcolm Deane
Margaret Davey
Charles Whitfield
Peter Whitfield
Ben Davey
Maitland Davey
Wendy Davey
John Silver

Wallatin Creek Wildlife and Landcare Inc.

Gavin Morgan
Kit Leake
David Leake
Sue McFarlane
Ashley Bonser
Colin Wilkins
Kevin Walsh
Mike McFarlane
Eric Neuman

Robert Lambeck CSIRO

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APPENDIX TWO.

Interview Questions

The standard interview guide for group members is provided below. The interview format was modified for state government agency members and personnel, and for research personnel. Changes to interview question were minor and involved re-wording, as illustrated below, with two questions modified and a single new question inserted for government agency interviews.

Modified questions:
Q. 17. As a government agency person, what have you gained from the process and the resulting outcome?
What has the group gained?
How will that help you in the future?

Q. 22. How does the decision-making by your group control/influence what happens at other levels?

Interview Guide for Group Members

Interview Questions

The interview will cover questions relating to sustainable agriculture, your group, and decisions made for natural resource management. You have been identified as a person who can provide some useful information and insight. Your individual anonymity will be protected and I ensure complete confidentiality. At any time you are free to withdraw from the project without prejudice. The format of the interview will cover a series of questions where I will probe certain topics and it should take approximately 1 - 11/2 hour to complete. The interview will be recorded to ensure accuracy. Again, thank you for your time today to participate in this project. [reiterate decision / process interested in]

Individual & Group Characteristics

1. What was the reason(s) for joining the group?
Why is it important to you to be involved in the group?

2. How are you involved?
What is the extent of your involvement, both now and in the future?

3. What have you gained from being a member of the group?
Are you satisfied by the group and its progress and what it has accomplished?

4. How would you describe the group?
What do you see as the group's strengths and weaknesses?
What capacity does the group have?

5. How, and in what way has the group changed over time?
What has influenced the change?

6. How self-sustaining do you see the group?
What do you think is the group's ability to function in the future?
What is needed?

Decision

7. What was the problem?
Why was it important to the group?

8. How does the outcome achieve the group's goals?

9. How do you think this decision has met regional/state level goals?

10. Could you please describe the process by which the decision(s) was made by the group?

11. What has influenced the process and actions taken by the group?

12. What were the key factors that helped/enabled the group in the decision process and to then take action?

13. What problems were experienced along the way in the process and implementation?
How did you go about dealing with them?

14. How do you think this process and outcome has improved the group's capacity / community's capacity?

15. How has this decision process and the actions taken enabled the group to make changes?
What has made this possible or not possible?

16. What power/control does your group have to make and implement the decision(s)?

17. What have you gained from the process and the resulting outcome?
What has the group gained?
How will that help you in the future?

18. How have partnerships and collaborations enabled the group to make changes and achieve their goal(s)?

19. What other groups does your group interact with?
How does this work and what does the group gain?

20. Was this a successful decision process and successful outcome?
Why do you believe it has been successful?
What was responsible for this success?

21. Generally, are you satisfied with how decisions are make by the group?
How could this be improved?

22. How does the decision-making by your group control/influence what happens in your catchment?

23. What does sustainable agriculture mean to you?

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